REPORT NUMBER: SPNCAP-CAL-12-001

NEW CAR ASSESSMENT PROGRAM (NCAP)
SIDE IMPACT POLE TEST

Chrysler Group LLC
2012 Chrysler 200 LX
Four Door Sedan

NHTSA NUMBER: MC0309

PREPARED BY:
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November 17, 2011

FINAL REPORT

PREPARED FOR:
U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
OFFICE OF CRASHWORTHINESS STANDARDS
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1200 NEW JERSEY AVE SE, ROOM W43-410
WASHINGTON, D.C. 20590

This final test report was prepared for the U.S. Department of Transportation, National Highway Traffic Safety Administration, in response to Contract Number DTNH22-09-D-00126.

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FINAL REPORT ACCEPTANCE BY OCWS:

_____
Division Chief, New Car Assessment Program
NHTSA, Office of Crashworthiness Standards

Date: _____

_____
COTR, New Car Assessment Program
NHTSA, Office of Crashworthiness Standards

Date: _____

Technical Report Documentation Page

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15. *Supplementary Notes*

16. Abstract

A 32.2 km/h (20 mph), 75° oblique impact Side NCAP Test was conducted on the subject 2012 Chrysler 200 LX Four Door Sedan in accordance with the specifications of the Office of Crashworthiness Standards Side NCAP Pole Laboratory Test Procedure for the generation of consumer information on vehicle side pole crash protection. This test was conducted at the Calspan Corporation Crash Test Facility in Buffalo, New York, on 10/12/2011.

The impact velocity was 31.96 km/h, and the ambient temperature at the struck (driver's) side of the vehicle was 17.2°C. The test vehicle post-test maximum crush was 392 at level 3. The test vehicle's occupant performance is as follows:

	Driver ATD (SID-IIs)		
Measurement Description	**Units**	**Threshold**	**Result**
Head Injury Criteria (HIC_{38})	N/A	1000	1,987.07
Resultant Lower Spine Acceleration	Gs	82	51.16
Combined Acetabular and Iliac Pelvic Force	N	5525	4,812.03

The two doors on the struck side of the vehicle did not separate from the body at the hinges or latches and the opposite doors did not open during the side impact event.

17. Key Words New Car Assessment Program (NCAP) Side Impact Pole Part 572V SID-IIs	*18. Distribution Statement* Copies of this report are available from: National Highway Traffic Safety Adm. Technical Ref. Division, 1200 New Jersey Ave. SE Washington, D.C. 20590

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Form DOT F1700.7 (8-72)

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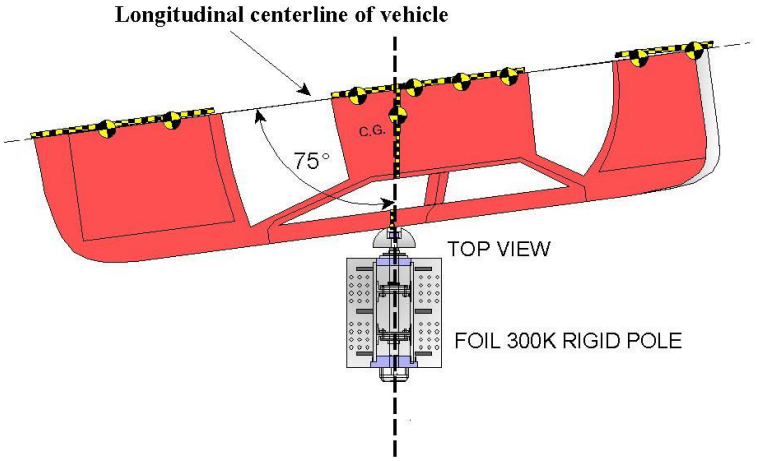
SECTION 1
PURPOSE AND TEST PROCEDURE

PURPOSE

This side impact test was conducted as part of the MY 2012 New Car Assessment Program Side Impact Test Program, sponsored by the National Highway Traffic Safety Administration (NHTSA), under Contract No. DTNH22-09-D-00126. The purpose of this test is to generate comparative side impact performance in a 2012 Chrysler 200 LX Four Door Sedan manufactured by Chrysler Group LLC. The side impact test was conducted in accordance with the Office of Crashworthiness Standard's Side NCAP Pole Laboratory Test Procedure, dated August 2011.

SECTION 2
SUMMARY OF NCAP SIDE IMPACT TEST

A rigid pole side test was conducted on a 2012 Chrysler 200 LX Four Door Sedan. The subject vehicle was towed into the rigid pole at an angle of 75° and a velocity of 31.96 km/h. The test was conducted by Calspan Corporation Transportation Research Group on 10/12/2011. Pre-test and post test photographs of the test vehicle and side impact dummy (SID-IIs) are included in Appendix A of this report. Please note that some of the pre-test photos were taken on 10/11/2011.



One Part 572V (SID-IIs) dummy was placed in the driver designated seating position according to instructions specified in the OCWS Side NCAP Pole Laboratory Test Procedure, dated August 2011. Camera locations and other pertinent camera information are included in this report.

The Part 572V (SID-IIs) Dummy was instrumented accordingly:

Head CG Triaxial Accelerometers
Thorax Upper, Middle, and Lower Rib Displacement Potentiometers
Abdomen Upper and Lower Rib Displacement Potentiometers
Lower Spine Triaxial (T12) Accelerometers
Illiac Load Cell
Acetabulum Load Cell

Appendix B contains the dummy response data. Dummy configuration and performance verification data can be found in Appendix C of this report.

Injury readings for the SID-IIs dummy were recorded as follows:

Measurement Description	Driver ATD (SID-IIs)		
	Units	IARV	Result
Head Injury Criteria (HIC36)	N/A	1000	1987.07
Lower Spine Acceleration	G	82	51.16
Total Pelvic Force	N	5525	4812.03
Maximum Thoracic Rib Deflection	mm	38*	30.572
Maximum Abdominal Rib Deflection	mm	45*	39.605

*Proposed IARV

SUPPLEMENTAL RESTRAINT INFORMATION

Restraint Type	Left Front (Driver) Occupant Location 1	
	Mounted	Deployed
Frontal Airbag	Yes	No
Knee Airbag	No	
Torso Airbag	Yes	Yes
Curtain Airbag	Yes	Yes
Seat Belt Pretensioner	Yes	Yes
Seat Belt Load Limiter	Yes	No

GENERAL COMMENTS:
tr2540 - MC0309 - 2011 Chrysler 200 SPNCAP (Side Pole) - Target 20 mph (P1 serial number - 8012)

Electronic Data Anomalies:

- Lower abdomen rib deflection, shows bottoming from 50-55 ms (at the peak). Data questionable between 50-55 ms
- Load cell 8 on pole barrier has questionable data between 22 and 37 ms.

SECTION 3
OCCUPANT AND VEHICLE INFORMATION

DATA SHEET NO.1
GENERAL TEST AND VEHICLE PARAMETER DATA

Test Vehicle:	2012 Chrysler 200 LX	NHTSA No:	MC0309
Test Program:	Side Pole NCAP	Test Date	10/12/2011

TEST VEHICLE INFORMATION AND OPTIONS

NHTSA No.	MC0309	Traction Control System (TCS)	Yes
Model Year	2012	Auto-Leveling System	No
Make	Chrysler	Automatic Door Locks (ADL)	Yes
Model	200 LX	Power Window Auto-Reverse	No
Body Style	Four Door Sedan	Other Optional Feature	--
VIN	1C3CCBAB8CN106241	Driver Front Airbag	Yes
Body Color	Dark blue	Driver Curtain Airbag	Yes
Odometer Reading (km/mi)	266 / 165	Driver Head/Torso Airbag	No
Engine Displacement (L)	2.4	Driver Torso Airbag	Yes
Type/No. Cylinders	I4	Driver Torso/Pelvis Airbag	No
Engine Placement	Lateral	Driver Pelvis Airbag	No
Transmission Type	Automatic	Driver Knee Airbag	No
Transmission Speeds	4-Speed	Rear Pass. Curtain Airbag	Yes
Overdrive		Rear Pass. Head/Torso Airbag	No
Final Drive	Front Wheel Drive	Rear Pass. Torso Airbag	No
Roof Rack	No	Rear Pass. Torso/Pelvis Airbag	No
Sunroof/T-Top	No	Rear Pass. Pelvis Airbag	No
Running Boards	No	Driver Seat Belt Pretensioners	Yes
Tilt Steering Wheel	Yes	Rear Pass. Seat Belt Pretensioners	-
Power Seats	No	Driver Load Limiters	No
Anti-Lock Brakes (ABS)	Yes	Rear Pass. Load Limiters	-
All-Wheel Drive (AWD)	No	Other Safety Restraint	-

Does owner's manual provide instructions to turn off automatic door locks? No

DATA FROM CERTIFICATION LABEL

Manufactured By	Chrysler Group LLC	GVWR (kg)	2,087
Date of Manufacture	8/11	GAWR Front (kg)	1,180
Vehicle Type	Passenger	GAWR Rear (kg)	1,007

VEHICLE SEATING AND WEIGHT CAPACITY DATA

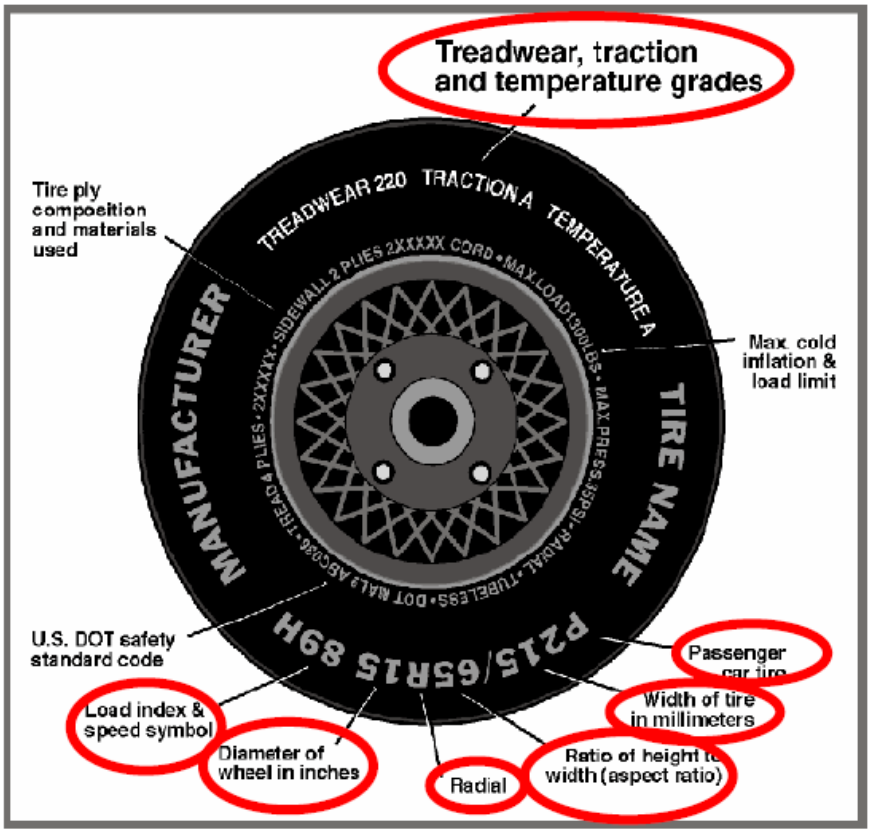
	Front	Rear	Third	Total	
Designated Seating Capacity (DSC)	2	3	0	5	
Vehicle Capacity Weight (VCW) (kg)				392.0	(A)
DSC X 68.04 kg				340.2	(B)
Rated Cargo and Luggage Weight (RCLW) (kg)				51.8*	(A-B)

VEHICLE SEAT TYPE

	Type of Seat Pan				Type of Seat Back		
						Adjustable	
Seating Location	Bucket	Bench	Split Bench	Contoured	Fixed	W/ Lever	W/ Knob
Front Seat	X					X	
Rear or Second Row Seat		X			X		
Third Row seat							

DATA SHEET NO. 1 (CONTINUED)
GENERAL TEST AND VEHICLE PARAMETER DATA

Test Vehicle:	2012 Chrysler 200 LX	NHTSA No:	MC0309
Test Program:	Side Pole NCAP	Test Date	10/12/2011



TIRE PLACARD INFORMATION

Measured Parameter	Front	Rear
Recommended Cold Tire Pressure (kPa)	220	220
Recommended Tire Size	P225/55R17	P225/55R17

TIRE SIDEWALL INFORMATION

Measured Parameter	Front	Rear
Maximum Tire Pressure	300	300
Tire Size on Vehicle	P225/55R17	P225/55R17
Tire Manufacturer	Michelin	Michelin
Tire Name	Primacy MXV4	Primacy MXV4
Tire Type	Passenger	Passenger
Tire Width (mm)	225	225
Aspect Ratio	55	55
Radial	Yes	Yes
Wheel Diameter (mm)	432	432
Load Index/Speed Symbol	97V	97V
Treadwear	620	620
Traction Grade	A	A
Temperature Grade	A	A
Tire Material	Rubber	Rubber

DATA SHEET NO.1 (CONTINUED)

GENERAL TEST AND VEHICLE PARAMETER DATA

Test Vehicle:	2012 Chrysler 200 LX	NHTSA No:	MC0309
Test Program:	Side Pole NCAP	Test Date	10/12/2011

TEST PRESSURES

	Units	LF	RF	LR	RR
As Delivered	kpa	220	220	220	220
Tire Placard	kpa	220	220	220	220
Owner's	kpa	220	220	220	220
As Tested	kpa	220	220	220	220

TEST VEHICLE AXLE WEIGHTS

		As Delivered (UVW)			As Tested (ATW)			Fully Loaded		
	Units	Front Axle	Rear Axle	Total	Front Axle	Rear Axle	Total	Front Axle	Rear Axle	Total
Left	kg	471.0	323.0		493.0	352.0		490.5	363.5	
Right	kg	457.5	293.0		454.0	333.0		461.0	328.0	
Ratio	%	60	40		58	42		58	42	
Totals	kg	928.5	616.0	1,544.5	947.0	685.0	1,632.0	951.5	691.5	1,643.0

TARGET TEST WEIGHT CALCULATION

Measured Parameter	Units	Value	
Total As Delivered Weight (UVW)	kg	1,544.5	(A)
Actual Weight of 1 P572V ATD (SID-IIs) Dummy Used	kg	44.1	(B)
Rated Cargo/Luggage Weight (RCLW)	kg	51.8	(C)
Calculated Vehicle Target Weight (TVTW)	kg	1,640.4	(A+B+C)

Does the measured As Tested Vehicle Weight lie within the required weight range (i.e., Calculated Test Vehicle Target Weight – 4.5 kg to -9 kg? ☒ Yes ☐ No

WEIGHT OF BALLAST AND VEHICLE COMPONENTS REMOVED TO MEET TVTW

Component Description	Weight (kg)
Ballast (if any)	None

TEST VEHICLE ATTITUDES AND CG

	Units	As Delivered	As Tested	Fully Loaded	Meets Requirement***
Driver Door Sill Angle (front-to-rear)*	Deg.	-0.7	-0.4	-0.4	Yes
Front Passenger Sill Angle (front-to-rear)*	Deg.	-0.7	-0.7	-0.5	Yes
Front Bumper Angle (left-to-right)**	Deg.	0.0	0.0	0.0	Yes
Rear Bumper Angle (left-to-right)**	Deg.	-0.4	-0.5	-0.5	Yes
Vehicle CG (Aft of Front Axle)	mm	1,103	1,160	1,164	Yes
Vehicle CG (Left (+) / Right (-) from Longitudinal Centerline)	mm	23	29	32	Yes

* ND=Nose Down (-), NU=Nose Up (+) ** LD=Left Down (-), LU=Left Up (+)

*** The "As Tested" vehicle attitude measurements must be equal to or between the "As Delivered" and "Fully Loaded" vehicle attitude measurements. Indicate "Yes" or "No" for Meets Requirement"

DATA SHEET NO. 2
SEAT, SEAT BELT, STEERING WHEEL ADJUSTMENT AND FUEL SYSTEMS DATA

Test Vehicle:	2012 Chrysler 200 LX	NHTSA No:	MC0309
Test Program:	Side Pole NCAP	Test Date	10/12/2011

SEAT POSITIONING

The driver's seat, front seat center (if applicable), and right front passenger's seat should be set to the forward-most, mid-height, mid-angle position. The struck-side rear passenger's seat, rear center seat, and non-struck side rear passenger's seats should be set to the rear-most, lowest, mid-angle position.

SCRL ANGLE RANGE

Seat	SCRL (º)		
	Max	Min	Mid
Driver Seat	16.9	12.9	14.7
Front Passenger Seat	FIXED	FIXED	FIXED
Front Center Seat*			
Struck Side Rear Seat	FIXED	FIXED	FIXED
Non-Struck Side Rear Seat	FIXED	FIXED	FIXED
Rear Center Seat*	FIXED	FIXED	FIXED

*if applicable

SEAT HEIGHT AND ANGLE

Seat	As Tested SCRL Angle (Mid) (º)	As Tested SCRP Height (mm)	SCRP Height Position	SCRP Height (mm)		
				Rearmost	Mid-Fore/Aft	Forward-Most
Driver Seat	14.7	22	Max	-	-	-
			Mid	4	13	22
			Min	-	-	-
Front Passenger Seat	No Seat Height and Angle Adjustment Available		Max			
			Mid			
			Min			
Front Center Seat*	N/A	N/A	Max			
			Mid			
			Min			
Struck Side Rear Seat	FIXED	FIXED	Max			
			Mid			
			Min			
Non-Struck Side Rear Seat	FIXED	FIXED	Max			
			Mid			
			Min			
Rear Center Seat*	FIXED	FIXED	Max			
			Mid			
			Min			

*if applicable

Note: Max and min values were not recorded for this test

DATA SHEET NO. 2 (CONTINUED)
SEAT, SEAT BELT, STEERING WHEEL ADJUSTMENT AND FUEL SYSTEMS DATA

Test Vehicle:	2012 Chrysler 200 LX	NHTSA No:	MC0309
Test Program:	Side Pole NCAP	Test Date	10/12/2011

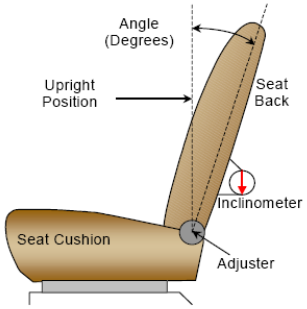
SEAT FORE/AFT POSITION

Seat	Total Fore/Aft Travel		Test Position from Forwardmost Position	
	mm	Detents*	mm	Detents*
Driver Seat	234	35	0	0
Front Passenger Seat	260	39	0	0
Front Center Seat*				
Struck Side Rear Seat	FIXED	FIXED	FIXED	FIXED
Non-Struck Side Rear Seat	FIXED	FIXED	FIXED	FIXED
Rear Center Seat*	FIXED	FIXED	FIXED	FIXED

*if applicable

SEAT BACK ANGLE ADJUSTMENT

The driver's seat back is positioned such that the dummy's head is level. The front center and front passenger's seat backs are positioned in a similar manner as the driver's seat back. The struck-side rear passenger seat back is positioned in accordance with the information provided by the manufacturer on Form No. 1 for the 5th percentile female dummy in a Side NCAP MDB test. The rear center and non-struck side rear passenger's seat back is set to match the struck-side rear seat back.



FRONT SEAT ASSEMBLY

Seat	Total Seat Back Angle Range		Test Position from Most Upright	
	Degrees	Detents*	Degrees	Detents*
Driver Seat w/Seated Dummy	74		4.3	
Front Passenger Seat	74		4.3	
Front Center Seat*				
Struck Side Rear Seat	FIXED	FIXED	FIXED	FIXED
Non-Struck Side Rear Seat	FIXED	FIXED	FIXED	FIXED
Rear Center Seat*	FIXED	FIXED	FIXED	FIXED

*if applicable

SEAT BELT ANCHORAGE ADJUSTMENT

Seat belt anchorages are adjusted in accordance with the information provided by the manufacturer on Form No. 1.

	Total # of Positions	Placed in Position #
Driver Seat	4	0

HEAD RESTRAINT ADJUSTMENT

Head restraints are adjusted to the lowest and most full forward in-use position.

	Total # of Positions	Placed in Position #
Driver Seat	3	3

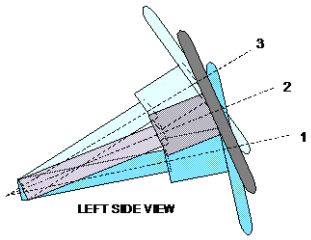
DATA SHEET NO. 2 (CONTINUED)
SEAT, SEAT BELT, STEERING WHEEL ADJUSTMENT AND FUEL SYSTEMS DATA

Test Vehicle:	2012 Chrysler 200 LX	NHTSA No:	MC0309
Test Program:	Side Pole NCAP	Test Date	10/12/2011

STEERING COLUMN ADJUSTMENT

Steering wheel and column adjustments are made so that the steering wheel geometric locus it describes when it moves through its full range of motion.

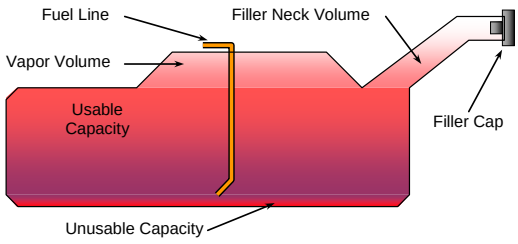
	Degrees	Fore/Aft Position (mm)
Lowermost, Position No. 1	72.8	
Geometric Center, Position No. 2	70.1	
Uppermost, Position No. 3	67.4	
Telescoping Steering Wheel Travel		48
Test Position	70.1	24



STEERING COLUMN ASSEMBLY

FUEL PUMP

Describe the fuel pump type, details about how it operates, and the location of the fuel filler neck.



VEHICLE FUEL TANK ASSEMBLY

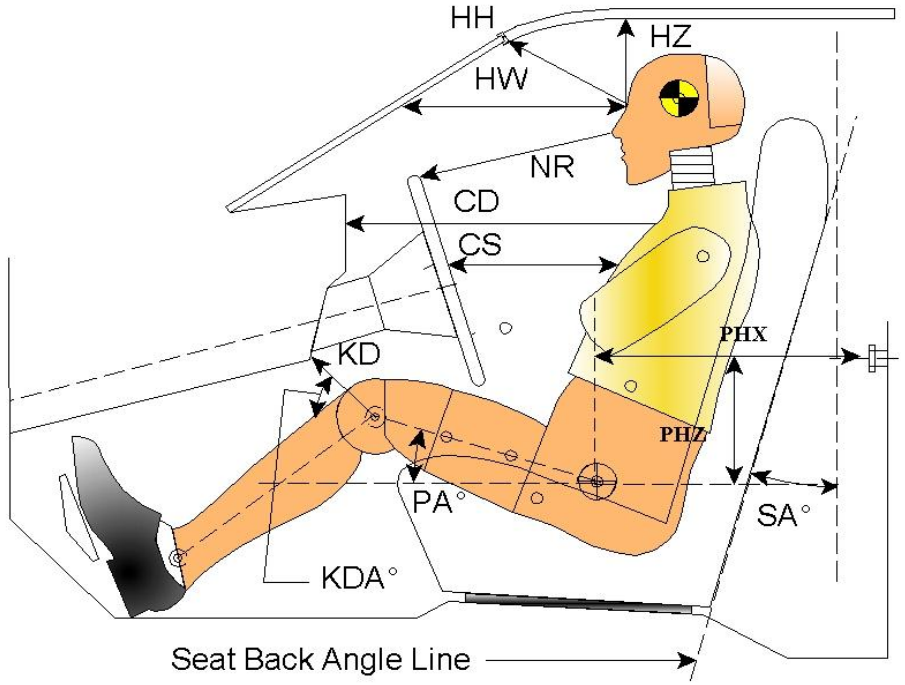
FUEL TANK CAPACITY DATA

	Liters
Usable Capacity of "Standard Tank" (see Form No. 1)	63.9
Usable Capacity of "Optional Tank" (see Form No. 1)	
Usable Capacity of Standard Tank (see Owner's Manual)	63.9
Usable Capacity of Optional Tank (see Owner's Manual)	
93% of Usable Capacity	59.5
Actual Amount of Solvent Used in Test	59.4
1/3 of Usable Capacity	21.3

Is the Actual Amount of Solvent Used in the test equal to 93% ±1% of the Usable Capacity stated on Form No. 1? ☒Yes ☐ No

DATA SHEET NO. 3
DUMMY LONGITUDINAL CLEARANCE DIMENSIONS

Test Vehicle:	2012 Chrysler 200 LX	NHTSA No:	MC0309
Test Program:	Side Pole NCAP	Test Date	10/12/2011

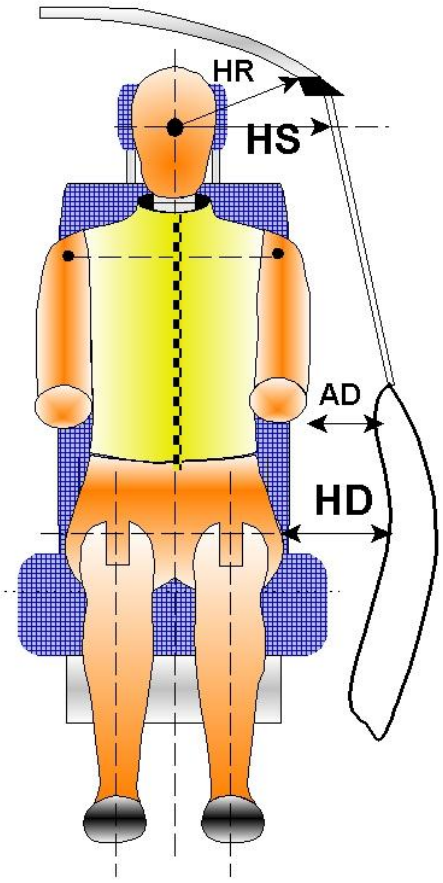


DUMMY ID# 8012

Code	Measurement Description	Driver	
		Length (mm)	Angle (°)
HH	Head to Header	247	
HW	Head to Windshield	574	
HZ	Head to Roof Liner	174	
NR	Nose to Rim	230	
CD	Chest to Dashboard	409	
CS	Chest to Steering Wheel	195	
KDL/KDAL°	Left Knee to Dash	101	38.7
KDR/KDAR°	Right Knee to Dash	92	39.6
PAX◦	Pelvic Tilt Angle (X-Axis)		18.2
PAY◦	Pelvic Tilt Angle (Y-Axis)		0.0
PHX	Hip Point to Striker (X-Axis)	340	
PHZ	Hip Point to Striker (Z-Axis)	130	

DATA SHEET NO. 4
DUMMY LATERAL CLEARANCE DIMENSIONS

Test Vehicle:	2012 Chrysler 200 LX	NHTSA No:	MC0309
Test Program:	Side Pole NCAP	Test Date	10/12/2011

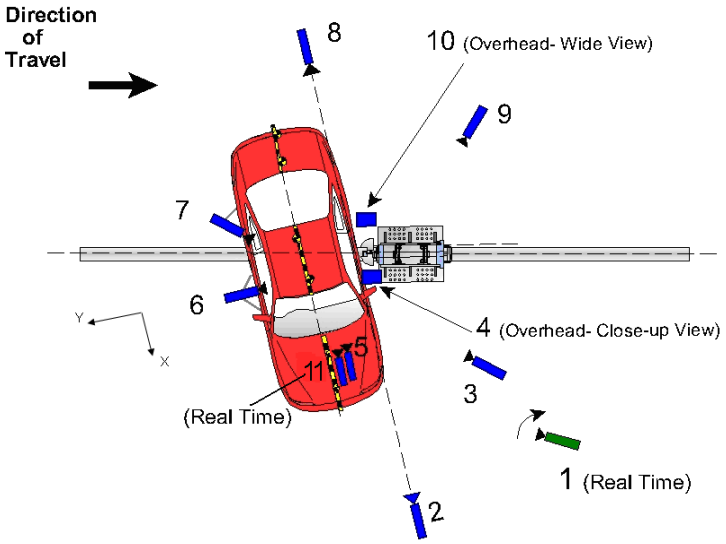


DUMMY ID#: DG8012

Code	Measurement Description	Length (mm)
HR	Head To Side Header	221
HS	Head to Side Window	394
AD	Arm to Door	119
HD	Hip Point to Door	134

DATA SHEET NO. 5
CAMERA AND INSTRUMENTATION DATA

Test Vehicle:	2012 Chrysler 200 LX	NHTSA No:	MC0309
Test Program:	Side Pole NCAP	Test Date	10/12/2011



REFERENCE (from Point of Impact for X and Y; from Ground for Z):
+ X = Forward of vehicle, + Y = Right of vehicle, + Z = Down

Camera No.	View	Coordinates (mm)			Lens Length (mm)	Operating Frame Rate (fps)
		X	Y	Z		
1	Real time (24-30 fps) pan view of impact				-	24
2	Front ground level - impact view	1790	6096	1140	24	1000
3	Impact side 45° - forward pole view	2334	2040	1500	24	1000
4	Overhead Close-up view of impact	0	0	5150	28	1000
5	Onboard – dummy front view				25	500
6	Onboard – dummy side view				12.5	500
7	Onboard – dummy rear oblique view				12.5	500
8	Rear ground level – impact view	-340	-8230	1060	28	1000
9	Impact side 45º - rearward pole view	2800	-3400	1515	24	1000
10	Overhead wide-view of impact	-206	0	5150	14	1000
11	Real-time (24-30 fps) – dummy front view				-	24

* All measurements accurate to ± 6 mm.
NOTE: Vehicle is at a 75º angle to the rigid pole.

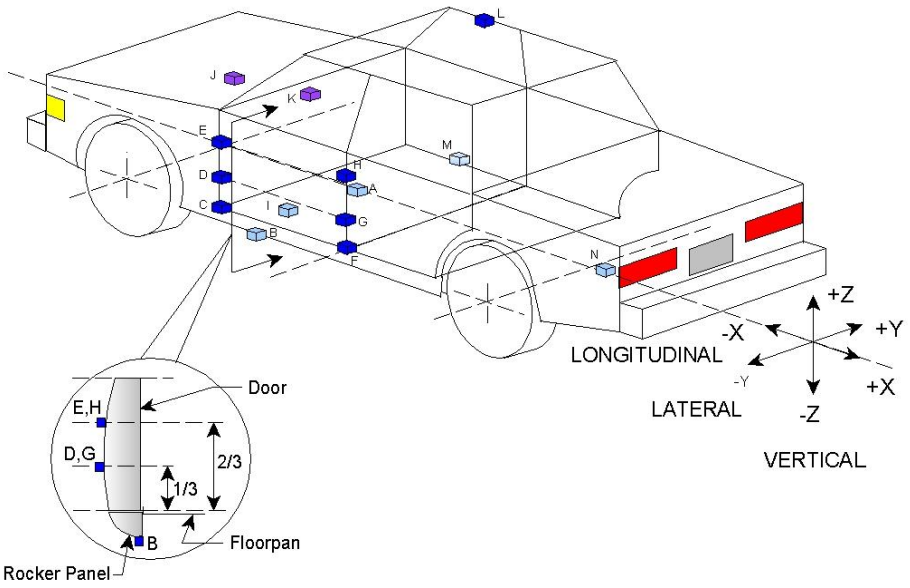
If applicable, explain why camera(s) did not operate as intended:

INSTRUMENTATION

	Number of Channels
Driver Dummy	16
Vehicle Structure	18
Pole Load Cells	8
TOTAL	40

DATA SHEET NO. 6
VEHICLE ACCELEROMETER DATA

Test Vehicle:	2012 Chrysler 200 LX	NHTSA No:	MC0309
Test Program:	Side Pole NCAP	Test Date	10/12/2011



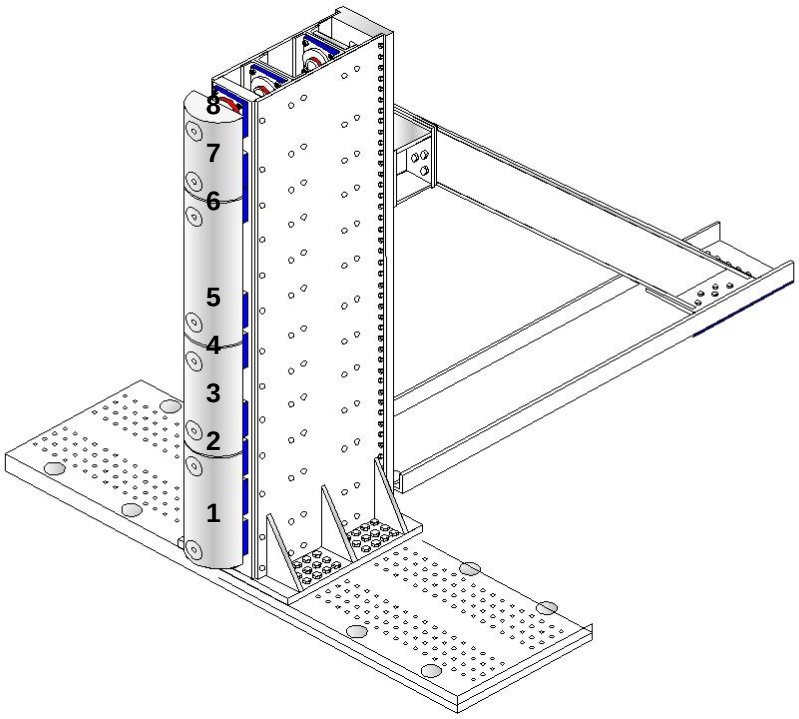
	Accelerometer/Sensor Location			
	ID	Coordinates (mm)		
		X	Y	Z
1	Vehicle CG	2,931	-2	526
2	Left Floor Sill	3,073	-656	322
3	A Pillar Sill	3,212	-641	384
4	A Pillar Low	3,229	-650	558
5	A Pillar Mid	3,187	-679	1,016
6	B Pillar Sill	2,223	-660	314
7	B Pillar Low	2,230	-694	496
8	B Pillar Mid	2,200	-690	968
9	Driver Seat Track	2,532	-554	365
10	Engine Top	1,780	-155	822
11	Firewall	1,458	104	717
12	Right Roof	2,111	513	1,466
13	Right Floor Sill	3,098	653	330
14	Rear Floorpan	963	-27	556

Reference: *X – Test Vehicle Rear Bumper (+ forward)*
Y – Test Vehicle Centerline (+ to right)
Z – Ground Plane (+ down)

DATA SHEET NO. 7
RIGID POLE LOAD CELL DATA

Test Vehicle:	2012 Chrysler 200 LX	NHTSA No:	MC0309
Test Program:	Side Pole NCAP	Test Date	10/12/2011

FOIL 300K RIGID POLE



Load Cell Locations	
ID	**Height From Ground (mm)**
1	200
2	590
3	750
4	1075
5	1260
6	1740
7	1920
8	2300

DATA SHEET NO. 8
POST-TEST OBSERVATIONS

Test Vehicle:	2012 Chrysler 200 LX	NHTSA No:	MC0309
Test Program:	Side Pole NCAP	Test Date	10/12/2011

TEST DUMMY INFORMATION AND CONTACT POINTS

Description	Driver Dummy
Dummy Type/Serial No.	SID-IIs / 8012
Face	Curtain Airbag
Top of Head	Curtain Airbag
Left Side of Head	Curtain Airbag
Back of Head	No Contact
Left Shoulder	Curtain Airbag/ Torso Airbag
Upper Torso	Torso Airbag
Lower Torso	Driver Side Door and Torso Airbag
Left Hip	Driver Side Door
Left Knee	Driver Side Door

POST TEST DOOR PERFORMANCE

Description	Struck Side		Non-Struck Side		Rear Hatch/ Other Door
	Front	Rear	Front	Rear	
Remained Closed and Operational	Not Operational	Not Operational	Yes	Yes	Yes
Total Separation from Vehicle at Hinges or Latches	No	No	N/A	N/A	
Latch or Hinge systems pulled out of their anchorages	No	No	No	No	
Disengaged from Latched Position	No	No	No	No	
Latch Separated from Striker	No	No	No	No	
Jammed Shut	Yes	Yes	No	No	
If Door opened at striker, Record width of opening at striker (mm)	55	83	N/A	N/A	

POST-TEST SEAT PERFORMANCE

Description	Struck Side		Non-Struck Side	
	Front	Rear	Front	Rear
Seat Movement Along Seat Track	Un-recoverable	No	No	No
Seat Disengagement from Floor Pan	No	No	No	No
Seat Back Movement from Initial Position	No	No	No	No
Seat Back Collapse	No	No	No	No

POST TEST STRUCTURAL OBSERVATIONS

Critical Areas of Performance	Observations and Conclusions
Pillar Performance	B-Pillar bent inwards causing a gap to form between the driver door B-Pillar
Sill Separation	None
Windshield Damage	Upper right glass cracked
Window Damage	Driver's side window non-operational and shattered
Other Notable Effects	None

Test Vehicle:	2012 Chrysler 200 LX	NHTSA No:	MC0309
Test Program:	Side Pole NCAP	Test Date	10/12/2011

SUPPLEMENTAL RESTRAINT SYSTEM INFORMATION

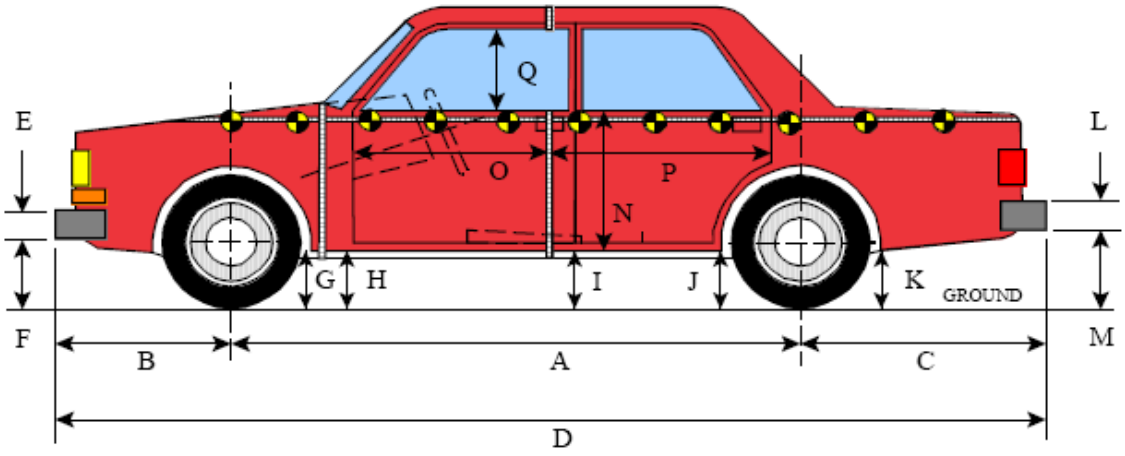
Restraint Type	Left Front (Driver) Occupant Location 1	
	Mounted	Deployed
Frontal Airbag	Yes	No
Knee Airbag	No	
Torso Airbag	Yes	Yes
Curtain Airbag	Yes	Yes
Seat Belt Pretensioner	Yes	Yes
Seat Belt Load Limiter	Yes	No

VEHICLE SPEED AND IMPACT DATA

Measured Parameter	Units	Requirement	Value
Vertical Impact Reference Line (Aft of Front Axle) (Intended Impact Point)	mm		1103
Actual Impact Point (aft of Front Axle)	mm		1118
Horizontal Offset from Vertical Impact Reference Line	mm	+/- 38 of Intended Impact Point	-15
Angle Between Vehicle's Longitudinal Centerline and Line of Forward Motion	degrees	75 +/- 3	75
Trap No. 1 Velocity (Primary)	km/h	31.4 to 33.0	32.0
Trap No. 2 Velocity (Redundant)	km/h	31.4 to 33.0	31.9

DATA SHEET NO. 9
VEHICLE PROFILE MEASUREMENTS

Test Vehicle:	2012 Chrysler 200 LX	NHTSA No:	MC0309
Test Program:	Side Pole NCAP	Test Date	10/12/2011



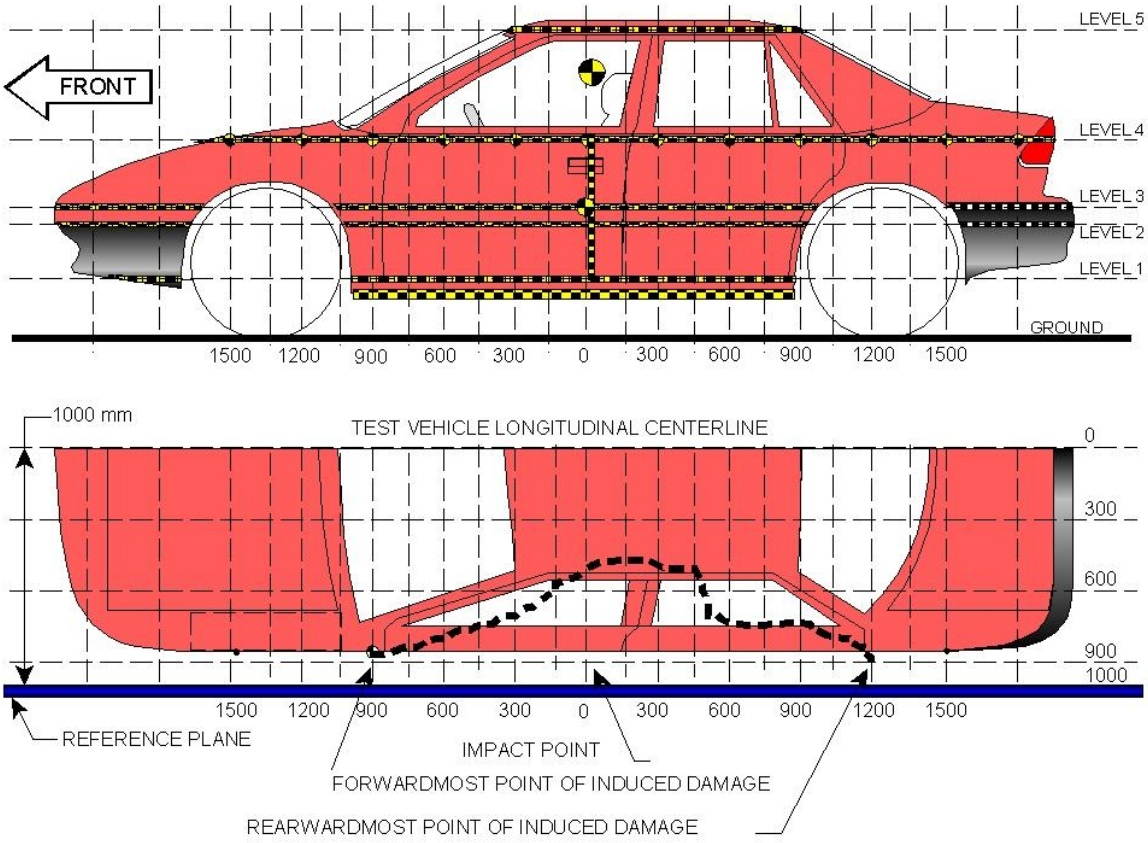
LEFT SIDE VIEW
All MEASUREMENTS IN (mm) WITH TOLERANCE OF ± 3mm

VEHICLE PRE- AND POST-TEST MEASUREMENT INFORMATION

Code	Description	Pre-Test	Post-Test	Difference
A	Vehicle Wheelbase	2763	2665	98
B	Front Axle to FSOV	1055	1104	-49
C	Rear Axle to RSOV	1052	1046	6
D	Total Vehicle Length at Centerline	4870	4815	55
E	Front Bumper Thickness	513	528	15
F	Front Bumper Bottom to Ground	358	369	11
G	Sill Height at Front Wheel Well	188	144	44
H	Sill Height at Front Door Leading Edge	219	188	31
I	Sill Height at B Pillar	233	226	7
J1	Sill Height at Rear Wheel Well	232	243	-10
J2	Pinch Weld Height at Rear Wheel Well	182	187	-4
K	Sill Height Aft of Rear Wheel Well	287	293	-5
L	Rear Bumper Thickness	700	705	-5
M	Rear Bumper Bottom to Ground	502	506	-4
N	Sill Height to Window Bottom Sill	710	710	0
O	Front Door Leading Edge to Impact CL	637	632	5
P	Rear Door Trailing Edge to Impact CL	1383	1340	43
Q	Front Window Opening	400	382	18
R	Right Side Length	4733	4728	6
S	Left Side Length	4731	4638	92
T	Vehicle Width at B Post	1802	1664	138

DATA SHEET NO. 10
VEHICLE EXTERIOR CRUSH MEASUREMENTS

Test Vehicle:	2012 Chrysler 200 LX	NHTSA No:	MC0309
Test Program:	Side Pole NCAP	Test Date	10/12/2011



NOTE: All measurements are in millimeters (mm)

MAXIMUM EXTERIOR CRUSH MEASUREMENTS

Level	Measurement Description	Height Above Ground	Maximum Exterior Static Crush	Distance from Impact
1	Sill Top	258	358	0
2	Occupant H-Point	572	384	150
3	Mid-Door	669	392	150
4	Window Sill	886	386	150
5	Window Top	1,422	132	150

NOTE: The above measurements should be taken along the vertical impact reference line. Vehicle measurements forward of the vertical impact reference line are negative.

DATA SHEET NO. 10 (CONTINUED)
VEHICLE EXTERIOR CRUSH MEASUREMENTS

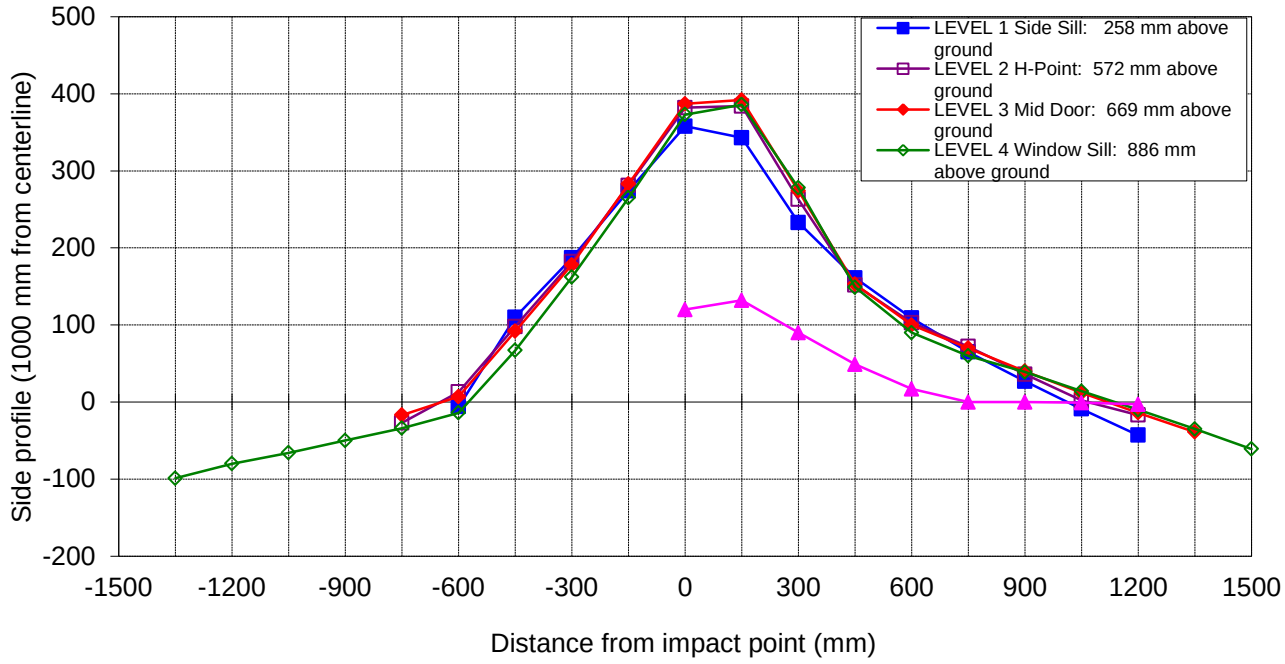
Test Vehicle:	2012 Chrysler 200 LX	NHTSA No:	MC0309
Test Program:	Side Pole NCAP	Test Date	10/12/2011

	Pre-Test					Post-Test					Difference				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
-1500															
-1350				778					877					-99	
-1200				810					890					-80	
-1050				828					894					-66	
-900				848					898					-50	
-750		922	920	864			949	937	898			-27	-17	-34	
-600	872	908	902	873		878	895	895	887		-6	13	7	-14	
-450	865	899	901	880		755	801	809	813		110	98	92	67	
-300	865	900	903	886		678	718	725	724		187	182	178	162	
-150	865	901	905	891		591	620	622	626		274	281	283	265	
0	866	901	906	895	571	508	519	519	522	451	358	382	387	373	120
150	863	902	906	898	619	520	518	514	512	487	343	384	392	386	132
300	861	901	906	898	626	628	638	632	620	536	233	263	274	278	90
450	858	901	905	901	627	697	749	752	752	578	161	152	153	149	49
600	854	898	903	900	629	745	795	803	810	612	109	103	100	90	17
750	849	895	900	899	630	784	823	830	839	630	65	72	70	60	0
900	843	892	897	893	629	816	856	857	854	629	27	36	40	39	0
1050	843	888	894	885	621	852	886	882	871	622	-9	2	12	14	-1
1200	859	901	900	882	591	902	918	914	892	594	-43	-17	-14	-10	-3
1350			916	880				955	915				-39	-35	
1500				880					941					-61	

NOTE: Pre-test measurements are taken when the vehicle is in the “As Tested” weight condition. Vehicle measurements forward of the vertical impact reference line are negative. The crush profile grid is established prior to test based on an estimated impact point. The final distance to impact is determined after the final dummy positioning and the pole is aligned with the center of gravity of the dummy’s head.

DATA SHEET NO. 10 (CONTINUED)
VEHICLE EXTERIOR CRUSH MEASUREMENTS

Test Vehicle:	2012 Chrysler 200 LX	NHTSA No:	MC0309
Test Program:	Side Pole NCAP	Test Date	10/12/2011



DATA SHEET NO. 11
FMVSS NO. 301 STATIC ROLLOVER RESULTSA

Test Vehicle:	2012 Chrysler 200 LX	NHTSA No:	MC0309
Test Program:	Side Pole NCAP	Test Date	10/12/2011

Test Time: 5:10 PM **Temperature:** 17.2 ^{o} C

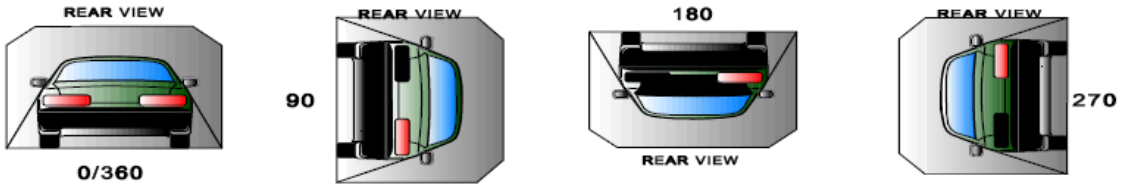
A. From impact until vehicle motion ceases:
(Maximum allowable is 1 oz.) 0 oz.

B. For the 5-minute period after motion ceases:
(Maximum allowable is 5 oz.) 0 oz.

C. For the following 25 minutes:
(Maximum allowable is 1 oz./minute) 0 oz.

D. Spillage Details: None

FMVSS 301 STATIC ROLLOVER DATA



ROLLOVER SOLVENT COLLECTION TIME TABLE IN SECONDS

Test Phase	Rotation Time	Hold Time	Total Time
0 to 90	71	300	371
90 to 180	67	300	367
180 to 270	64	300	364
270 to 360	66	300	366

FMVSS NO. 301 ROLLOVER SPILLAGE TABLE

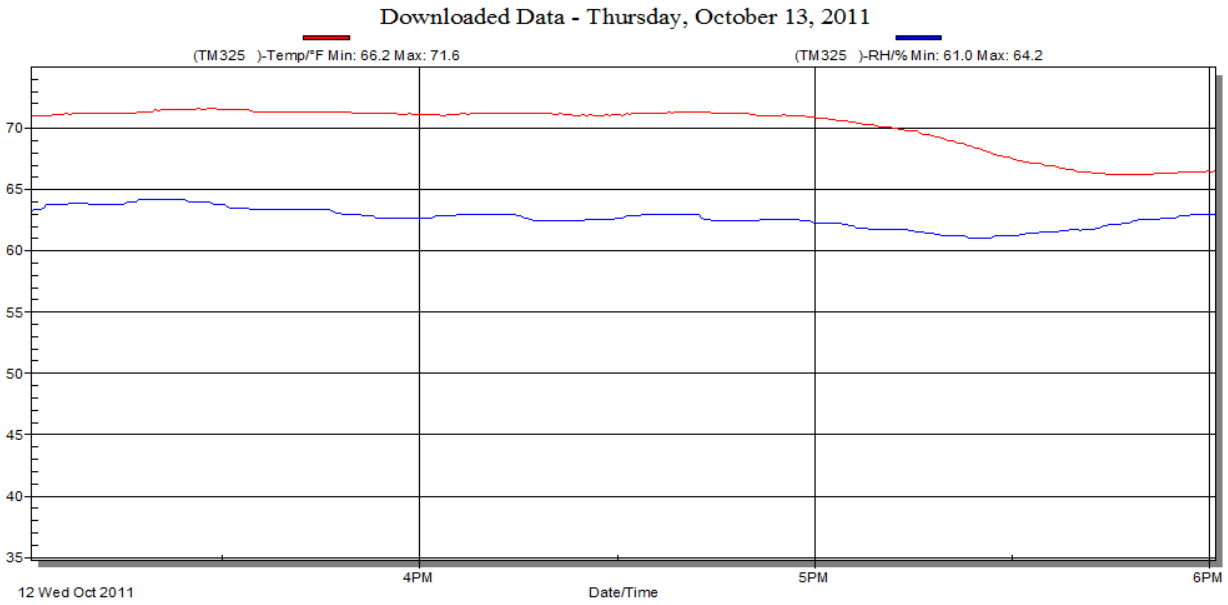
Test Phase	First 5 Minutes	Sixth Minute	Seventh Minute	Eighth Minute
0 to 90	0	0		
90 to 180	0	0		
180 to 270	0	0		
270 to 360	0	0		

ROLLOVER SOLVENT SPILLAGE LOCATION TABLE

Test Phase	Spillage Location
0 to 90	
90 to 180	
180 to 270	
270 to 360	

DATA SHEET NO. 12
DUMMY/VEHICLE TEMPERATURE STABILIZATION DATA

Test Vehicle:	2012 Chrysler 200 LX	NHTSA No:	MC0309
Test Program:	Side Pole NCAP	Test Date	10/12/2011



APPENDIX A
PHOTOGRAPHS

TABLE OF PHOTOGRAPHS

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4	Post-Test Frontal View of Test Vehicle	A-6
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17	Pre-Test Left Side View of Pole Positioned Against Side of Vehicle *(should be positioned at Ideal Impact Point if possible)*	A-13
18	Pre-Test Right Side View of Pole Positioned Against Side of Vehicle *(should be positioned at Ideal Impact Point if possible)*	A-13
19	Pre-Test Close-Up View of Impact Point Target *(impact reference line should be clearly indicated)*	A-14
20	Post-Test Close-Up View of Impact Point Target Showing Impact Location *(impact reference line and impact point should be clearly indicated)*	A-14
21	Pre-Test Front Close-Up View of Dummy Head and Chest *(through front window to show position of seat belt across dummy's chest, including inch tape intended to show pretensioner firing)*	A-15
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23	Pre-Test Left Side View of Dummy Showing Belt and Chalking *(door open)*	A-16
24	Pre-Test Left Side View of Dummy Shoulder and Door Top View	A-16
25	Post-Test Left Side View of Dummy Shoulder and Door Top View	A-17
26	Pre-Test Front View of Seat Back Prior to Dummy Positioning *(should include head restraint and show centerline)*	A-17
27	Pre-Test Front Close-Up View of Dummy Head and Shoulders in Relation to Head Restraint *(through front window) (should only show head and shoulders, not chest, and level should be included in photo, as should seat centerline)*	A-18

28	Pre-Test Front View of Seat Pan Prior to Dummy Positioning *(should show seat centerline)*	A-18
29	Pre-Test Overhead View of Dummy Thighs on Seat Pan *(should be taken through the steering wheel, if possible)*	A-19
30	Pre-Test Left Side View of Dummy's Neck Showing Position of Adjustable Neck Bracket	A-19
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32	Pre-Test Placement of Dummy's Feet	A-20
33	Pre-Test View of Belt Anchorage for Dummy *(should show test position and include detent or millimeter markings, if applicable)*	A-21
34	Pre-Test Left Side View of Steering Wheel *(should show test position and include detent or millimeter markings, if applicable)*	A-21
35	View of Disengaged Parking Brake *(taken at the same time as As Delivered photos)*	A-22
36	Pre-Test View of Parking Brake *(should be taken at the same angle as previous photo)*	A-22
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38	Pre-Test Close-Up Left Side View of Driver Seat Back *(should show test position and include detent or millimeter markings)*	A-23
39	Pre-Test Close-Up View of Driver Seat Back or Head Restraint *(should show test position and include level, placed at manufacturer's designated location, as indicated on Form 1, to show angle at test position)*	A-24
40	Pre-Test Dummy and Door Clearance View	A-24
41	Post-Test Dummy and Door Clearance View	A-25
42	Pre-Test Right Side View of Dummy and Front Seat of Occupant Compartment *(through vehicle with door open)*	A-25
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44	Pre-Test Inner Door Panel View	A-26
45	Post-Test Inner Door Panel View Showing Dummy Contact Location *(with dummy removed and airbags untouched)*	A-27
46	Post-Test Dummy Close-Up Head Contact with Vehicle View *(if applicable, with dummy removed)*	A-27
47	Post-Test Dummy Close-Up Head Contact with Side Airbag View *(if applicable, with dummy removed and airbag arranged to show contact marks)*	A-28
48	Post-Test Dummy Close-Up Torso Contact with Vehicle Interior View *(if applicable, with dummy removed)*	A-28
49	Post-Test Dummy Close-Up Torso Contact with Side Airbag View *(if applicable, with dummy removed and airbag arranged to show contact marks)*	A-29
50	Post-Test Dummy Close-Up Pelvis Contact View *(if applicable, with dummy removed)*	A-29
51	Post-Test Dummy Close-Up Pelvis Contact with Side Airbag View *(if applicable, with dummy removed and airbag arranged to show contact marks)*	A-30
52	Pre-Test View of Fuel Filler Cap or Fuel Filler Neck	A-30
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56	Pre-Test Pole Barrier Front View	A-32

57	Post-Test Pole Barrier Front View	A-33
58	Pre-Test Pole Barrier Side View	A-33
59	Post-Test Pole Barrier Side View	A-34
60	Pre-Test Ballast View	A-34
61	Post-Test Primary and Redundant Speed Trap Read-Out *(primary and redundant speeds should be labeled and photo should include a placard that displays the NHTSA No.)*	A-35
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64	FMVSS No. 301 Static Rollover 180 Degrees	A-36
65	FMVSS No. 301 Static Rollover 270 Degrees	A-37
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Figure A-1: As Delivered Right Front ¾ View of Test Vehicle

Figure A-2: As Delivered Left Rear ¾ View of Test Vehicle

Figure A-3: Pre-Test Frontal View of Test Vehicle

Figure A-4: Post-Test Frontal View of Test Vehicle

Figure A-5: Pre-Test Left Front ¾ View of Test Vehicle

Figure A-6: Post-Test Left Front ¾ View Test Vehicle

Figure A-7: Pre-Test Left Side View of Test Vehicle

Figure A-8: Post-Test Left Side View of Test Vehicle

Figure A-9: Pre-Test Left Rear ¾ View of Test Vehicle

Figure A-10: Post-Test Left Rear ¾ View of Test Vehicle

Figure A-11: Pre-Test Rear View of Test Vehicle

Figure A-12: Post-Test Rear View of Test Vehicle

Figure A-13: Pre-Test Right Side View of Test Vehicle

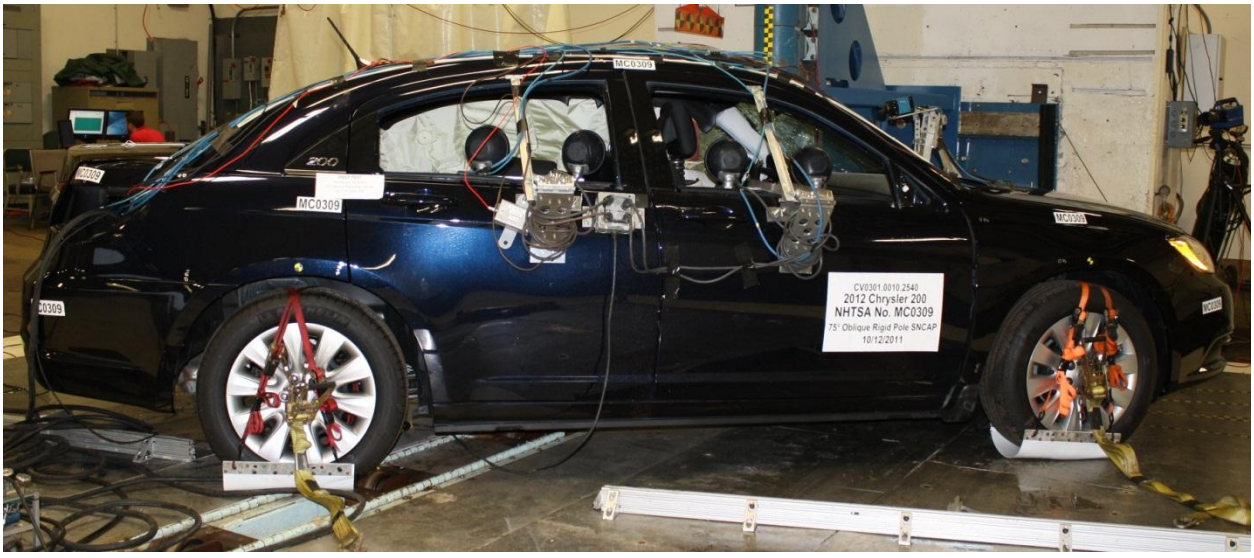


Figure A-14: Post-Test Right Side View of Test Vehicle

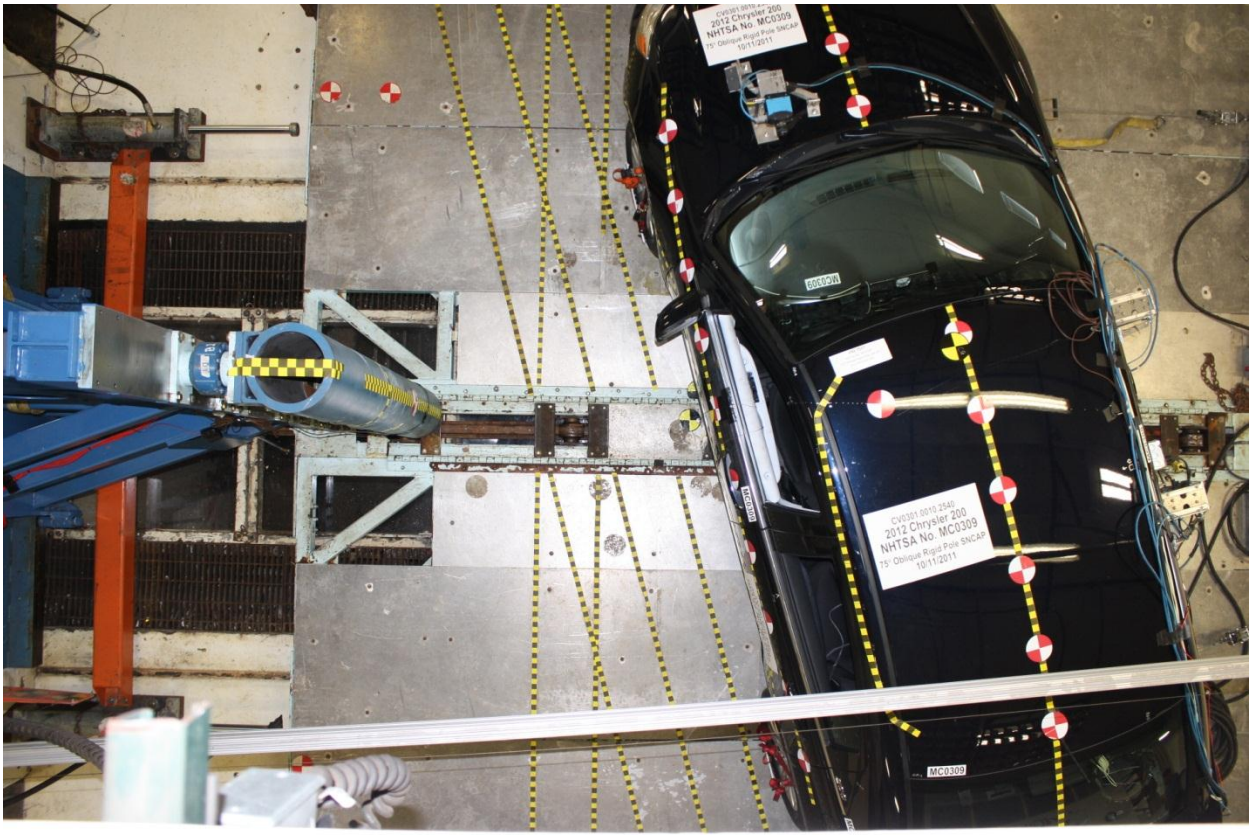


Figure A-15: Pre-Test Overhead View of Test Area

Figure A-16: Post-Test Overhead View of Test Area

Figure A-17: Pre-Test Left Side View of Pole Positioned Against Side of Vehicle

Figure A-18: Pre-Test Right Side View of Pole Positioned Against Side of Vehicle

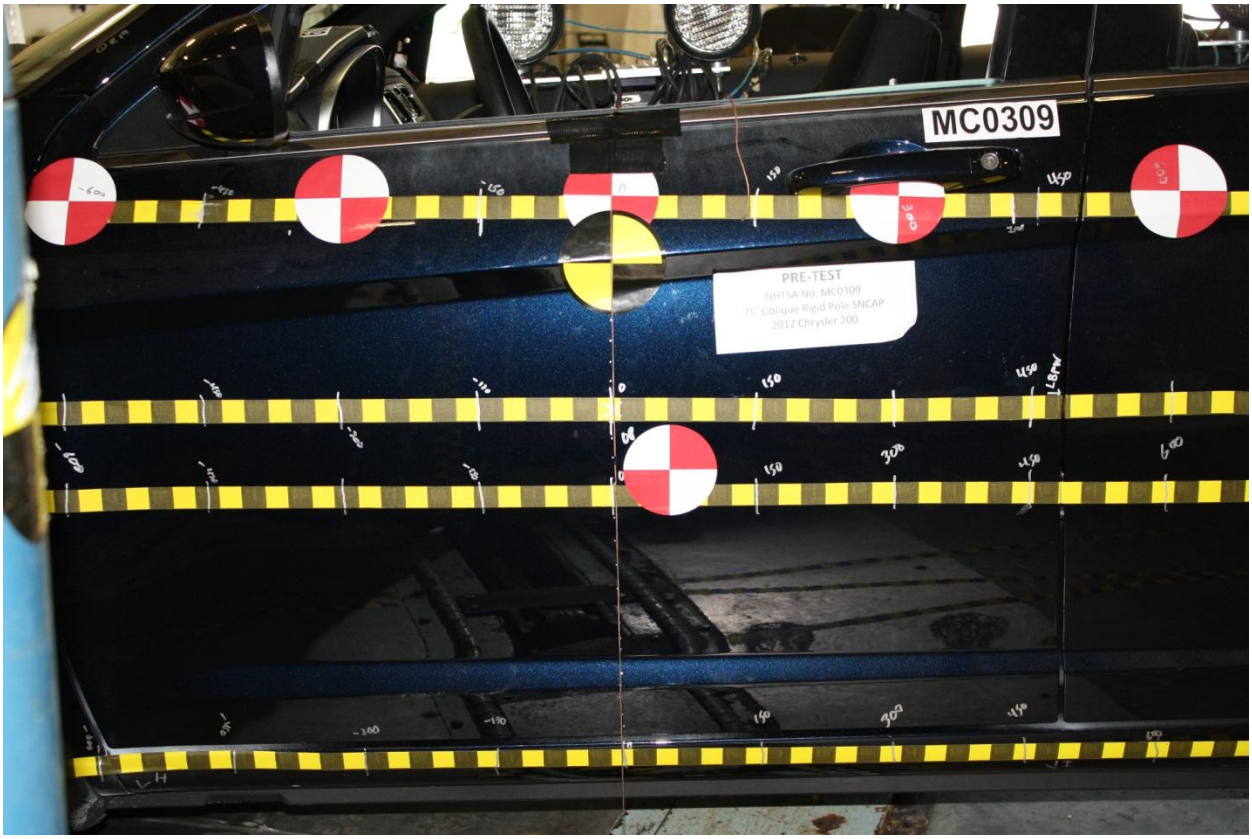


Figure A-19: Pre-Test Close-Up View of Impact Point Target

Figure A-20: Post-Test Close-Up View of Impact Point Target Showing Impact Location

Figure A-21: Pre-Test Front Close-Up View of Dummy Head and Chest

Figure A-22: Post-Test Front Close-Up View of Dummy *(through front window)*

Figure A-23. Pre-Test Left Side View of Dummy Showing Belt and Chalking

Figure A-24: Pre-Test Left Side View of Dummy Shoulder and Door Top View

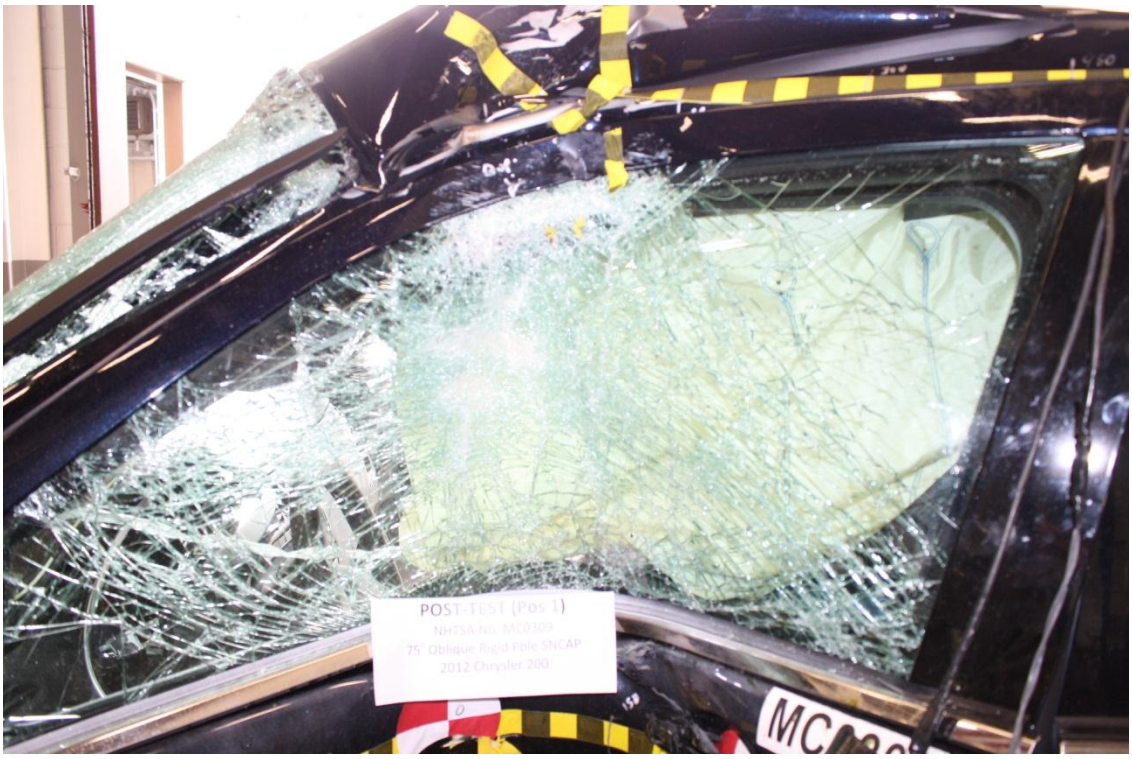


Figure A-25: Post-Test Left Side View of Dummy Shoulder and Door Top View

Figure A-26: Pre-Test Front View of Seat Back Prior to Dummy Positioning

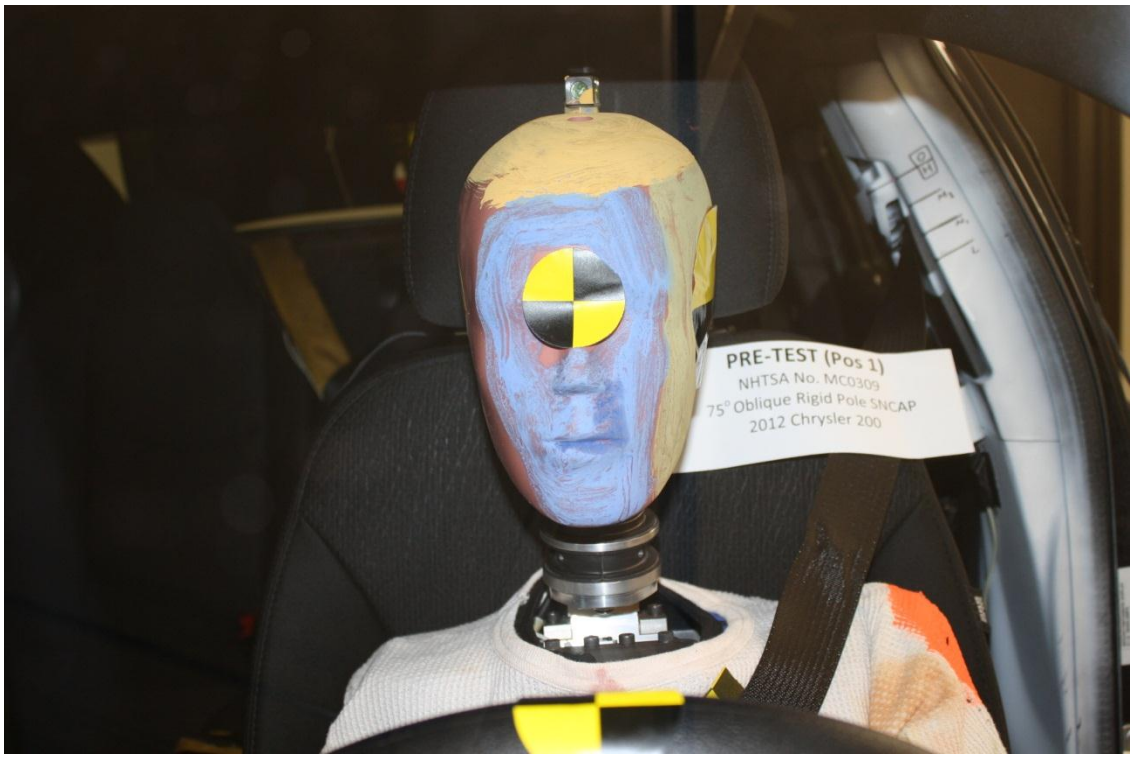


Figure A-27: Pre-Test Front Close-Up View of Dummy Head and Shoulders in Relation to Head Restraint

Figure A-28: Pre-Test Front View of Seat Pan Prior to Dummy Positioning

Figure A-29: Pre-Test Overhead View of Dummy Thighs on Seat Pan

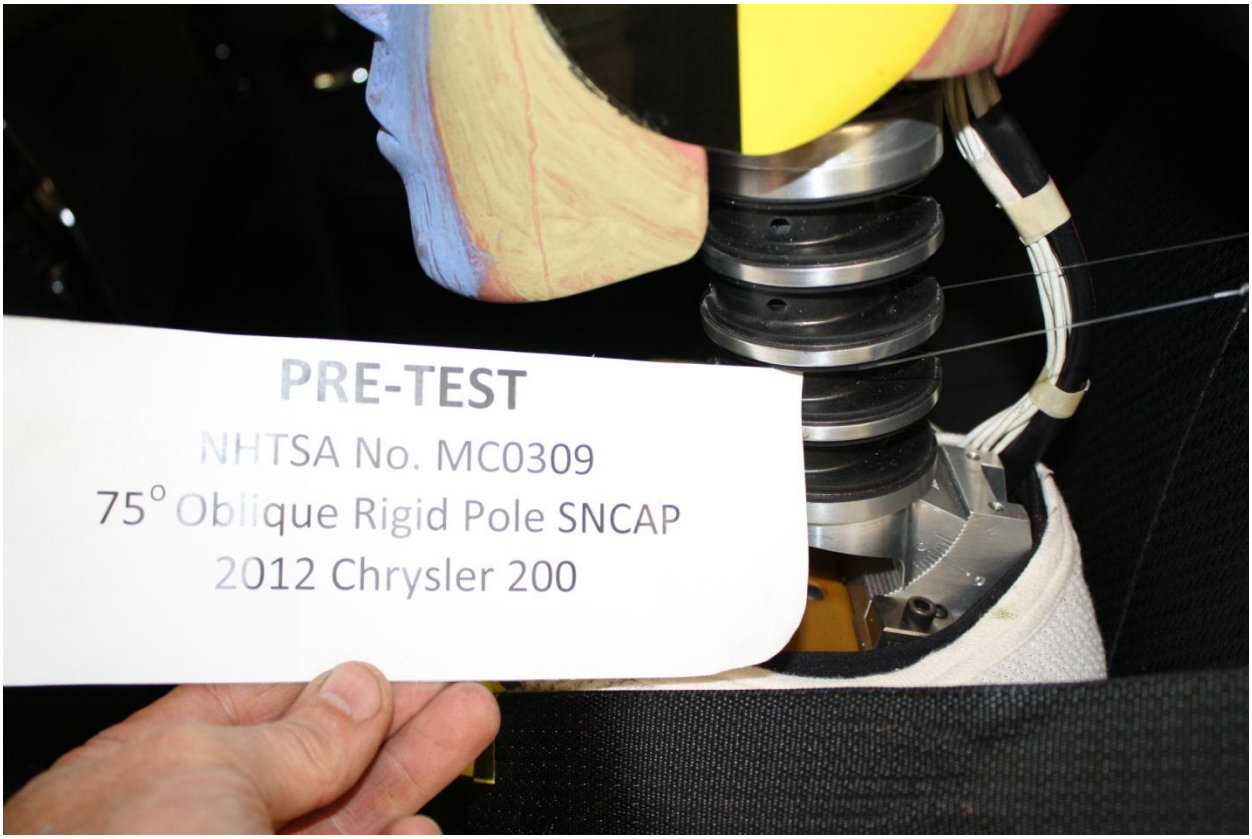


Figure A-30: Pre-Test Left Side View of Dummy's Neck Showing Position of Adjustable Neck Bracket

Figure A-31: Pre-Test Left Side View of Dummy's Head Showing Dummy's Head is Level

Figure A-32: Pre-Test Placement of Dummy's Feet

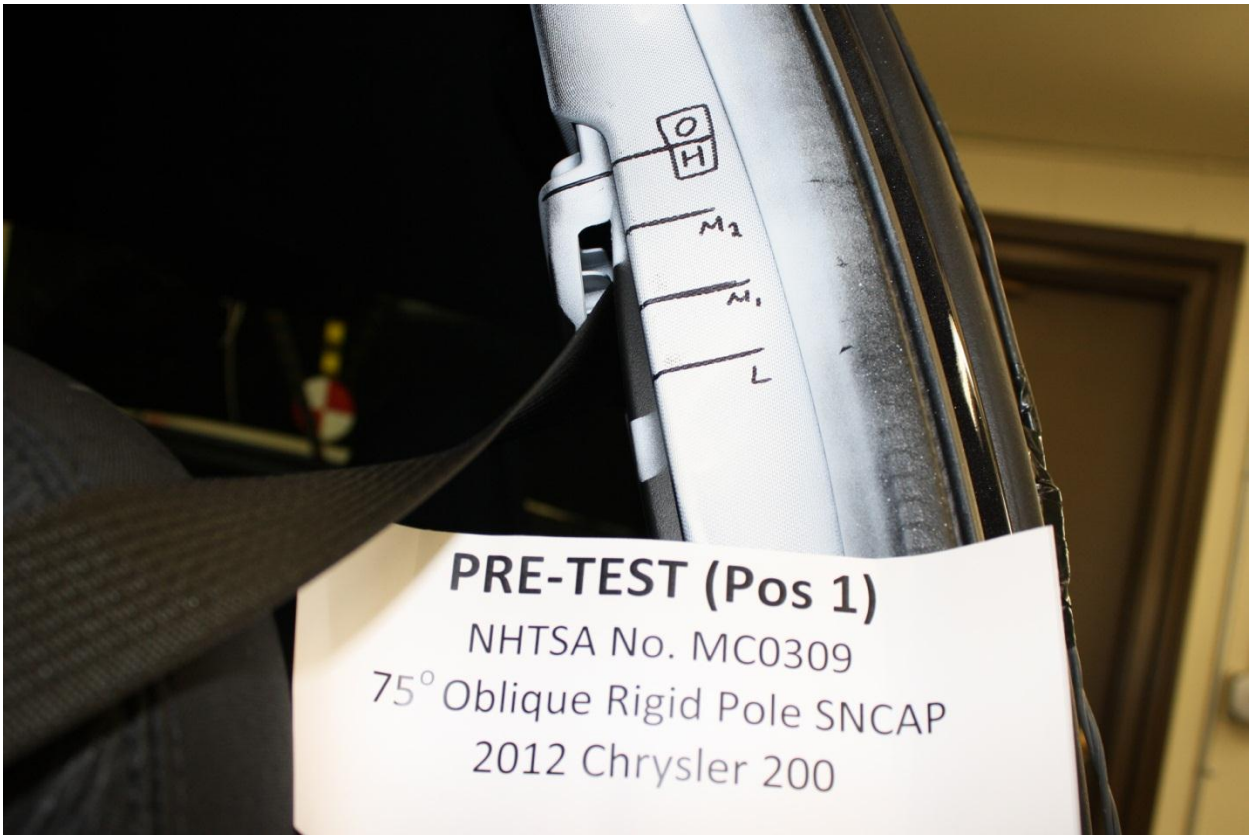


Figure A-33: Pre-Test View of Belt Anchorage for Dummy

Figure A-34: Pre-Test Left Side View of Steering Wheel

Figure A-35: View of Disengaged Parking Brake

Photo Not Available

Figure A-36: Pre-Test View of Parking Brake

Figure A-37: Pre-Test Close-Up Left Side View of Driver Seat Track

Figure A-38: Pre-Test Close-Up Left Side View of Driver Seat Back

Figure A-39: Pre-Test Close-Up View of Driver Seat Back or Head Restraint

Figure A-40: Pre-Test Dummy and Door Clearance View

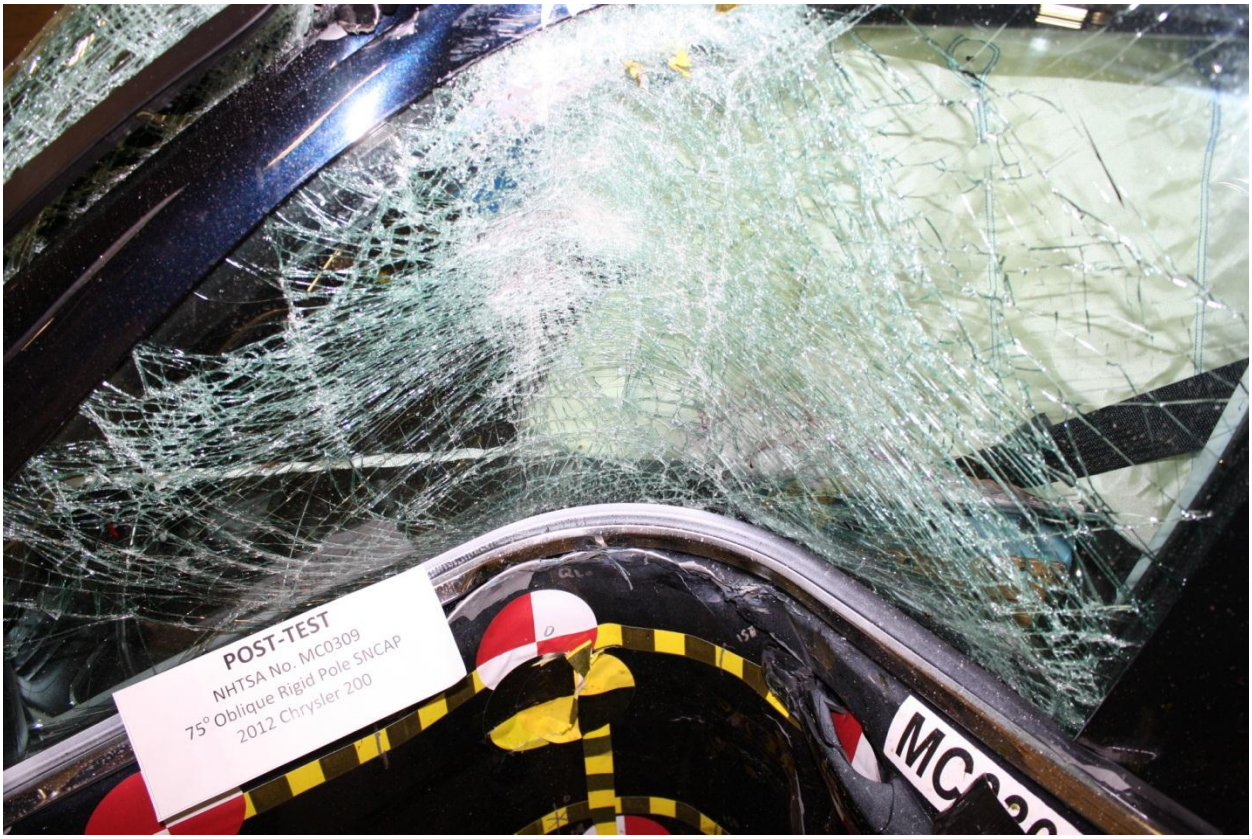


Figure A-41: Post-Test Dummy and Door Clearance View

Figure A-42: Pre-Test Right Side View of Dummy and Front Seat of Occupant Compartment

Figure A-43: Post-Test Right Side View of Dummy and Front Seat of Occupant Compartment

Figure A-44: Pre-Test Inner Door Panel View

Figure A-45: Post-Test Inner Door Panel View Showing Dummy Contact Location

Figure A-46: Post-Test Dummy Close-Up Head Contact with Vehicle View

Figure A-47: Post-Test Dummy Close-Up Head Contact with Side Airbag View

Figure A-48: Post-Test Dummy Close-Up Torso Contact with Vehicle Interior View

Figure A-49: Post-Test Dummy Close-Up Torso Contact with Side Airbag View

Figure A-50: Post-Test Dummy Close-Up Pelvis Contact View

Photo Not Applicable

No Contact

Figure A-51: Post-Test Dummy Close-Up Pelvis Contact with Side Airbag View

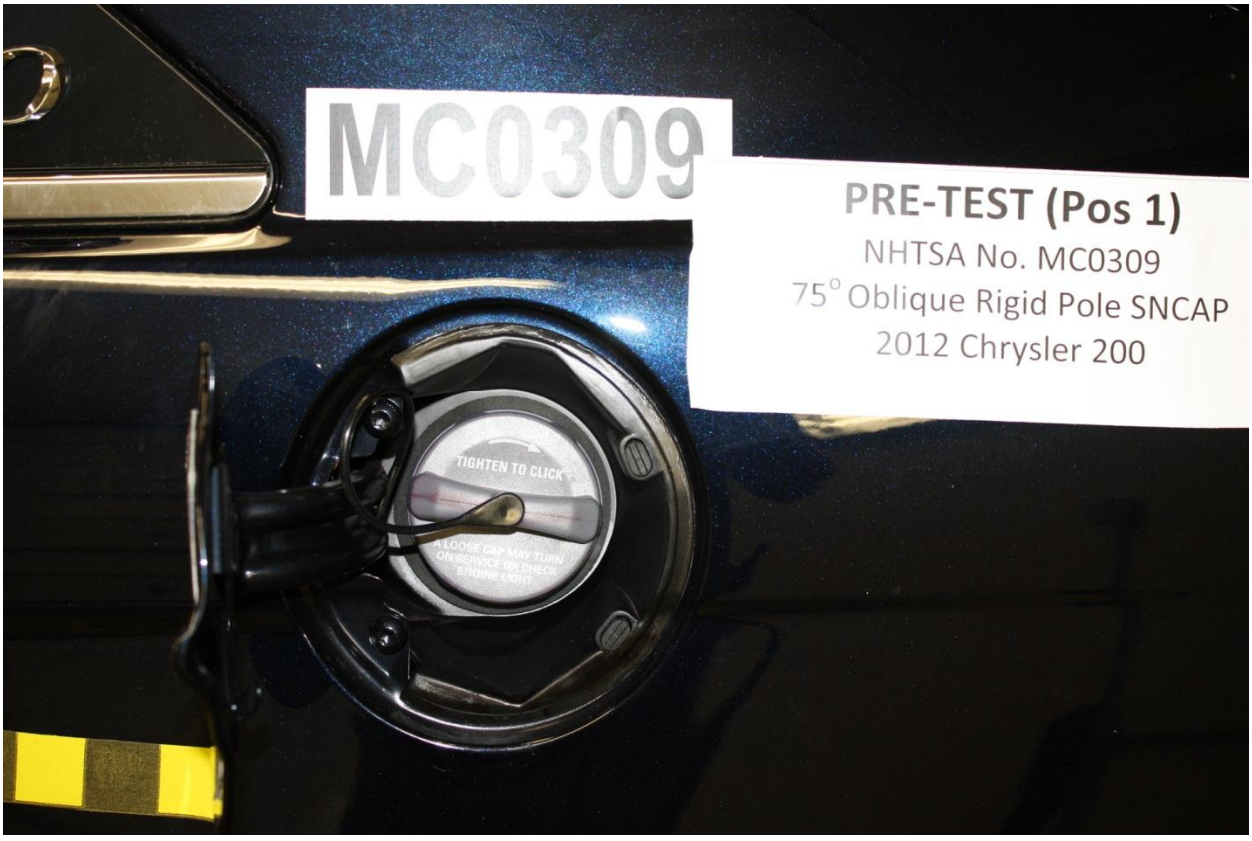


Figure A-52: Pre-Test View of Fuel Filler Cap or Fuel Filler Neck

Figure A-53: Post-Test View of Fuel Filler Cap or Fuel Filler Neck

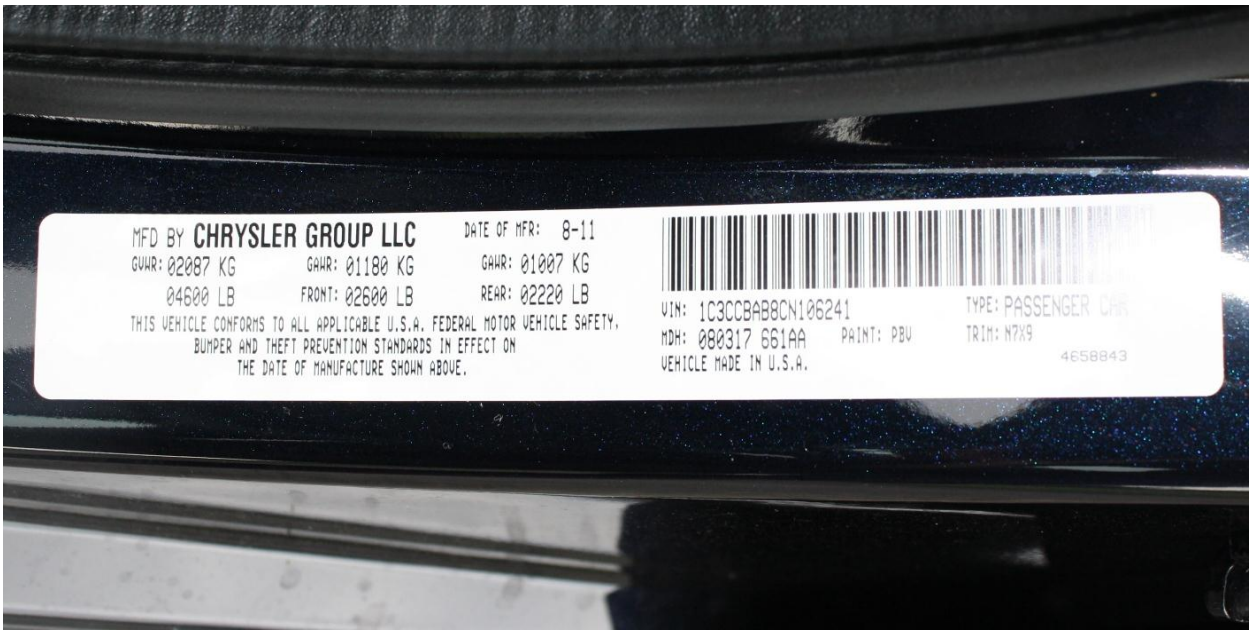


Figure A-54: Close-Up View of Vehicle's Certification Label

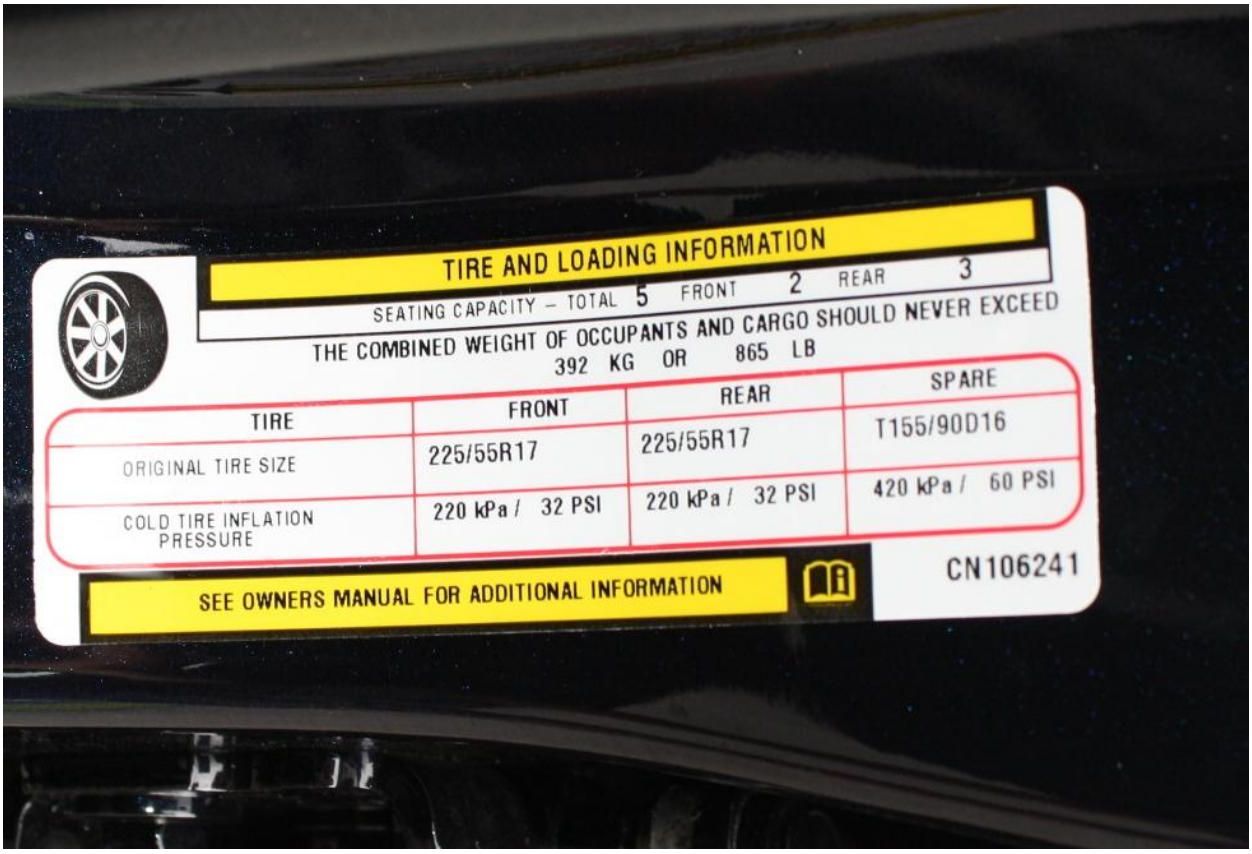


Figure A-55: Close-Up View of Vehicle's Tire Information Placard or Label

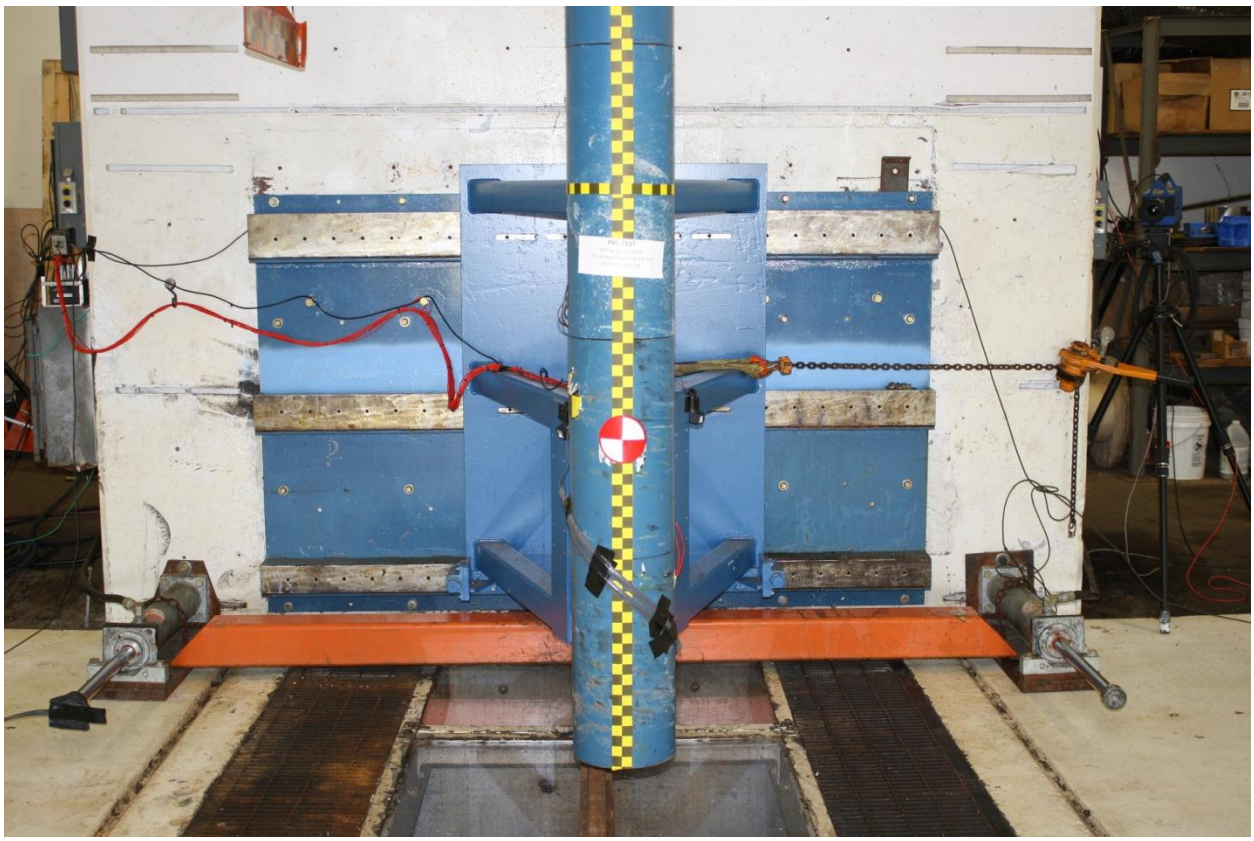


Figure A-56: Pre-Test Pole Barrier Front View

Figure A-57: Post-Test Pole Barrier Front View

Figure A-58: Pre-Test Pole Barrier Side View

Figure A-59: Post-Test Pole Barrier Side View

Figure A-60: Pre-Test Ballast View

Figure A-61: Post-Test Primary and Redundant Speed Trap Read-Out
(Left = Primary, Right = Redundant)

Figure A-62: FMVSS No. 301 Static Rollover 0 Degrees

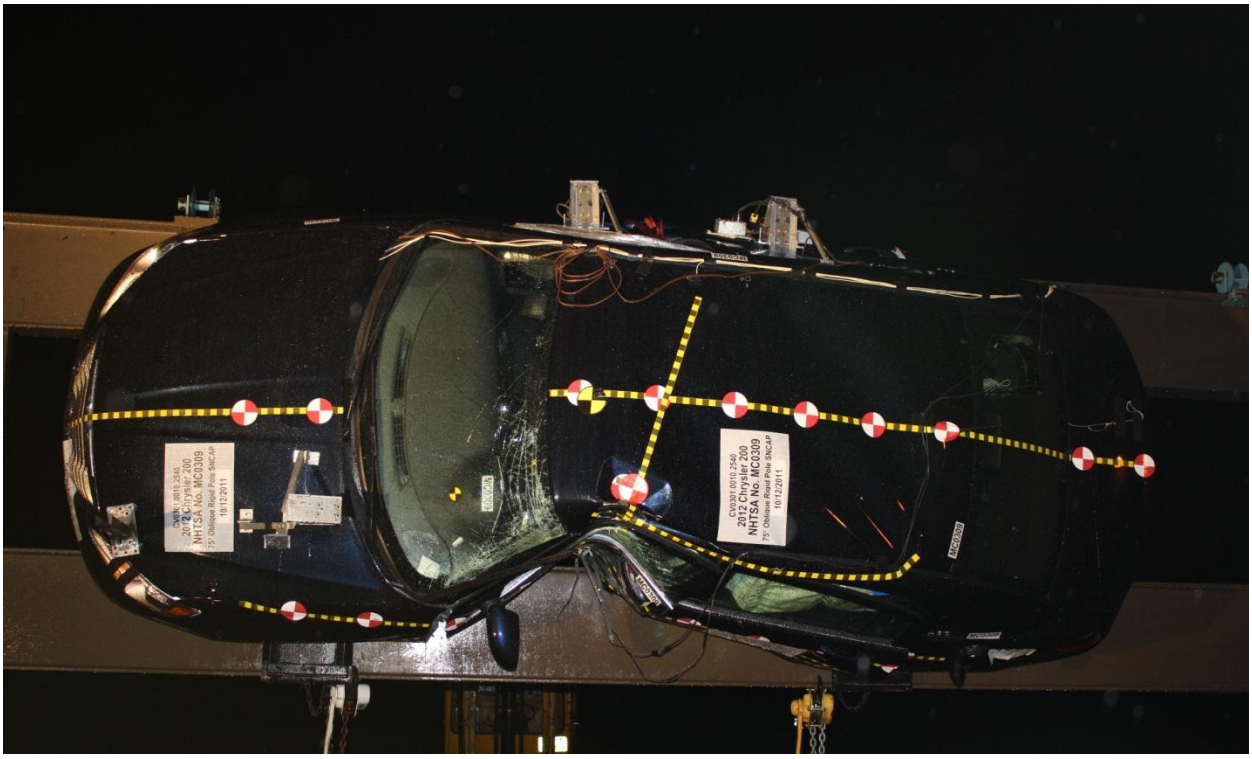


Figure A-63: FMVSS No. 301 Static Rollover 90 Degrees

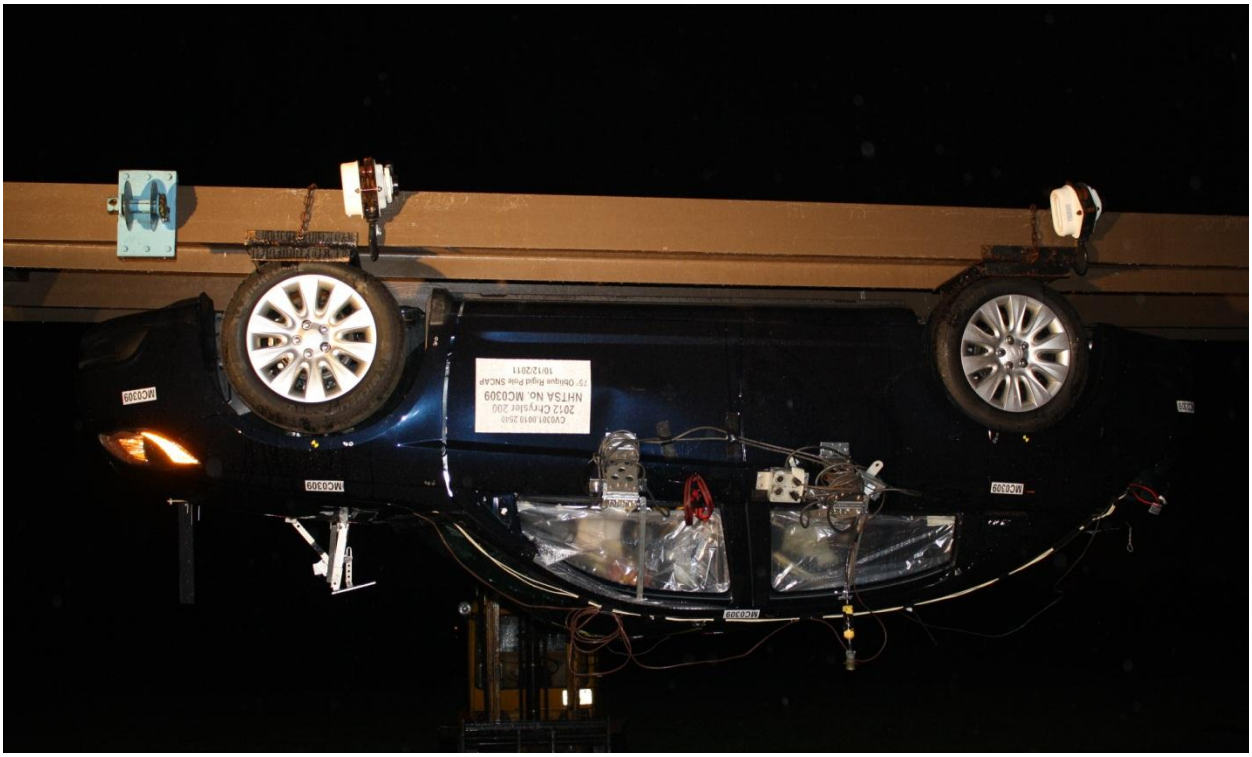


Figure A-64: FMVSS No. 301 Static Rollover 180 Degrees

Figure A-65: FMVSS No. 301 Static Rollover 270 Degrees

Figure A-66: FMVSS No. 301 Static Rollover 360 Degrees

Figure A-67: Impact Event

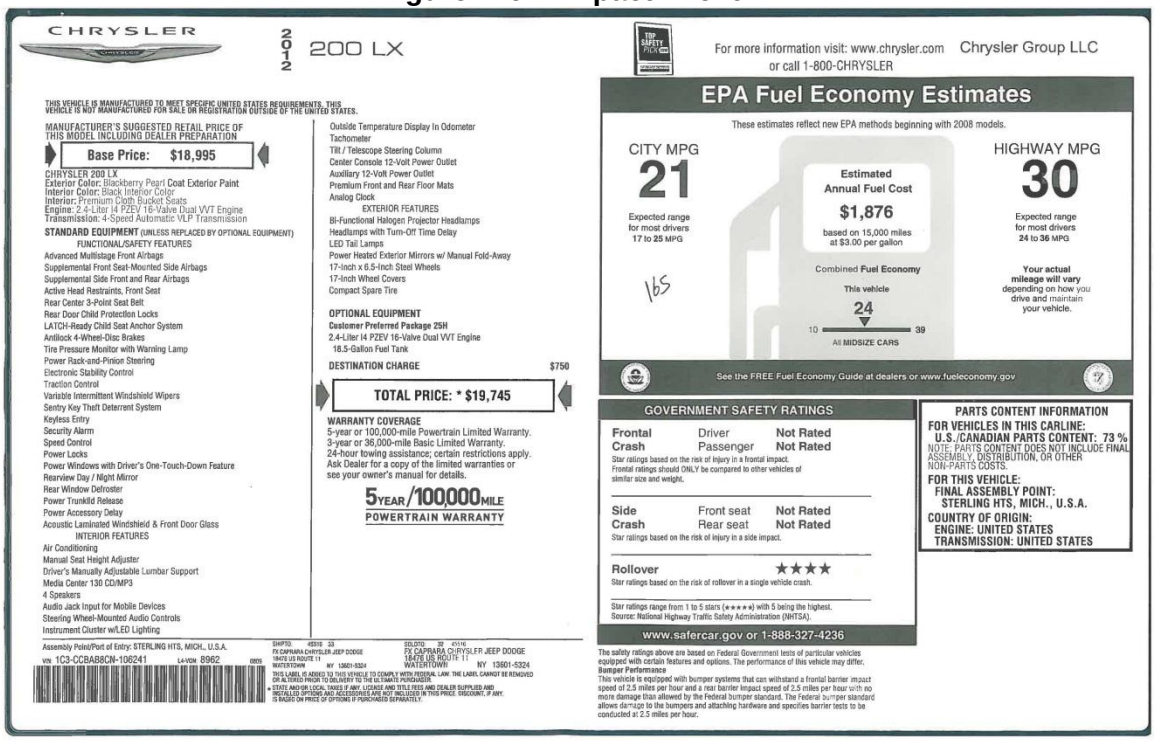


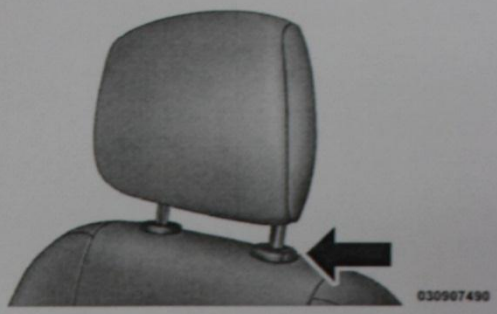
Figure A-68: Monroney Label

8

identified by any markings, only through visual inspection of the head restraint. The head restraint will be split in two halves, with the front half being soft foam and trim, the back half being decorative plastic.

When AHRs deploy during a rear impact, the front half of the head restraint extends forward to minimize the gap between the back of the occupant's head and the AHR. This system is designed to help prevent or reduce the extent of injuries to the driver and front passenger in certain types of rear impacts. Refer to "Occupant Restraints" in "Things To Know Before Starting Your Vehicle" for further information.

To raise the head restraint, pull upward on the head restraint. To lower the head restraint, press the push button, located at the base of the head restraint, and push downward on the head restraint.

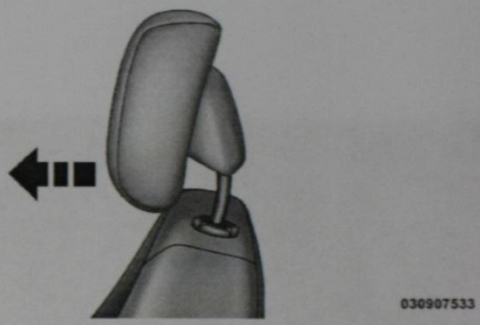


Push Button

For comfort the Active Head Restraints can be tilted forward and rearward. To tilt the head restraint closer to the back of your head, pull forward on the bottom of the head restraint. Push rearward on the bottom of the head restraint to move the head restraint away from your head.

9

Active Head Restraint (Normal Position)



Active Head Restraint (Tilted)

NOTE:

- The head restraints should only be removed by qualified technicians, for service purposes only. If either of the head restraints require removal, see your authorized dealer.

10

- In the event of deployment of an Active Head Restraint, refer to "Occupant Restraints/Resetting Active Head Restraints (AHR)" in "Things to Know Before Starting Your Vehicle" for further information.

WARNING!

- **Do not place items over the top of the Active Head Restraint, such as coats, seat covers or portable DVD players. These items may interfere with the operation of the Active Head Restraint in the event of a collision and could result in serious injury or death.**

(Continued)

WARNING! (Continued)

- **Active Head Restraints may be deployed if they are struck by an object such as a hand, foot or loose cargo. To avoid accidental deployment of the Active Head Restraint ensure that all cargo is secured, as loose cargo could contact the Active Head Restraint during sudden stops. Failure to follow this warning could cause personal injury if the Active Head Restraint is deployed.**

Head Restraints — Rear Seats

The rear seat head restraints are fixed and cannot be adjusted. For proper routing of a Child Seat Tether refer to "Occupant Restraints" in "Things to Know Before Starting Your Vehicle" for further information.

Figure A-69: Head Restraint Use and Adjustment Information from Vehicle Owner's Manual

APPENDIX B

VEHICLE AND DUMMY RESPONSE DATA PLOTS

TABLE OF DATA PLOTS

No.		Page
	Driver Dummy Instrumentation Plots	
1	Driver Head Acceleration (X) Primary vs. Time	B-5
2	Driver Head Acceleration (Y) Primary vs. Time	B-5
3	Driver Head Acceleration(Z) Primary vs. Time	B-6
4	Driver Head Resultant Primary vs. Time	B-6
5	Driver Lower Spine T12 Acceleration (X) vs. Time	B-7
6	Driver Lower Spine T12 Acceleration (Y) vs. Time	B-7
7	Driver Lower Spine T12 Acceleration (Z) vs. Time	B-8
8	Driver Lower Spine Y12 Resultant Acceleration vs. Time	B-8
9	Driver Iliac Wing Force on Impact Side (Y) vs. Time	B-9
10	Driver Acetabulum Force on Impact Side (Y) vs. Time	B-9
11	Driver Total Pelvis Force on Impact Side (Y) vs. Time	B-10

The following additional data for this test can be obtained from the Research and Development section of the NHTSA website. The website can be found at www.NHTSA.dot.gov.

Additional Driver Dummy Instrumentation Data

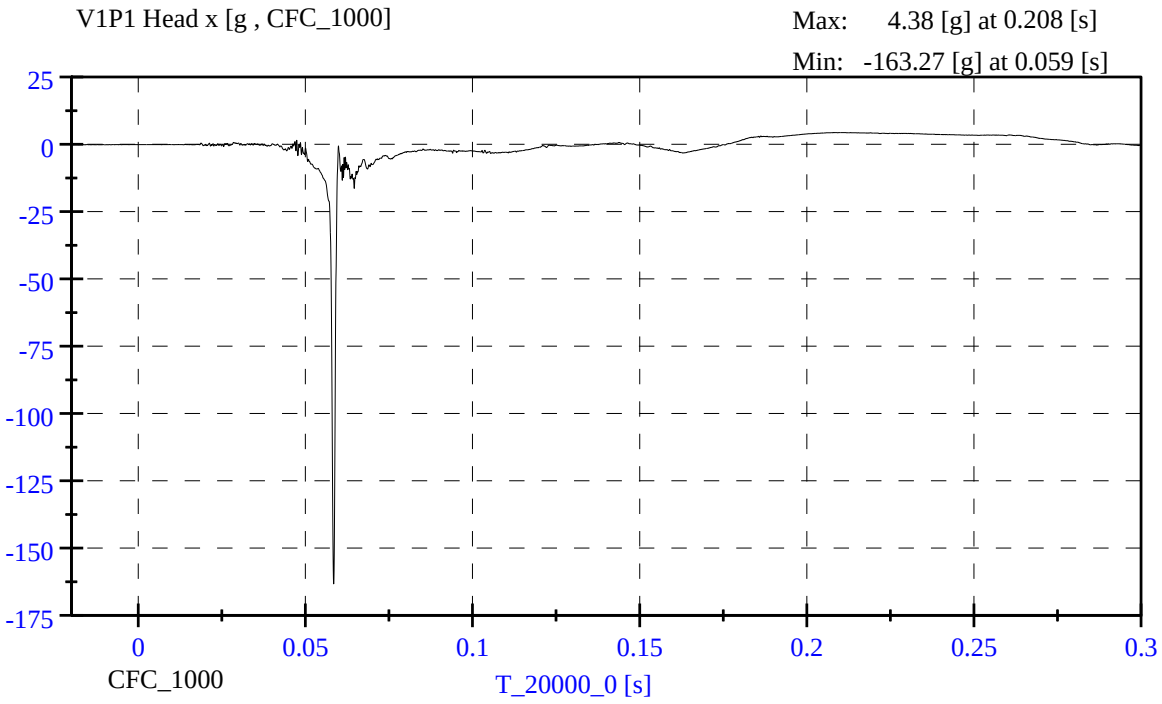
Driver Head Acceleration (X) Redundant
Driver Head Acceleration (Y) Redundant
Driver Head Acceleration (Z) Redundant
Driver Upper Thorax Rib Deflection (Y)
Driver Middle Thorax Rib Deflection (Y)
Driver Lower Thorax Rib Deflection (Y)
Driver Upper Abdomen Rib Deflection (Y)
Driver Lower Abdomen Rib Deflection (Y)
Driver Shoulder Contact Switch
Driver Torso Contact Switch
Driver Pelvis Contact Switch

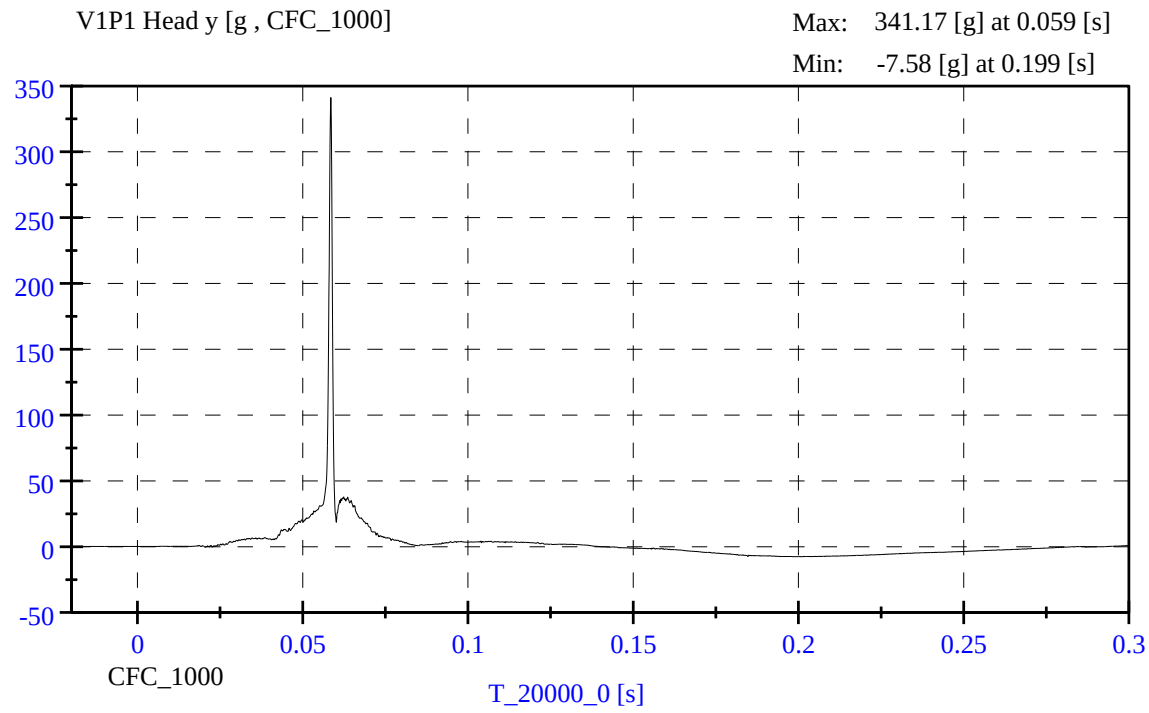
Vehicle Instrumentation Data

Vehicle Center of Gravity Acceleration (X)
Vehicle Center of Gravity Acceleration (Y)
Vehicle Center of Gravity Acceleration (Z)
Vehicle Center of Gravity Angular Rate About X (Roll)
Vehicle Center of Gravity Angular Rate About Y (Pitch)
Vehicle Center of Gravity Angular Rate About Z (Yaw)
Left Floor Sill Acceleration (Y)
Left A-Pillar Sill Acceleration (Y)
Left Lower A-Pillar Acceleration (Y)
Left Mid A-Pillar Acceleration (Y)
Left B-Pillar Sill Acceleration (Y)
Left Lower B-Pillar Acceleration (Y)
Left Mid B-Pillar Acceleration (Y)
Driver Seat Track at Dummy H-Point Acceleration (Y)
Engine Top Acceleration (X)
Engine Top Acceleration (Y)
Firewall Center Acceleration (Y)
Right Roof at Vertical Impact Reference Line Acceleration (Y)
Right Sill at Vertical Impact Reference Line Acceleration (Y)
Rear Floorpan Behind Rear Axle at Centerline Acceleration (X)
Rear Floorpan Behind Rear Axle at Centerline Acceleration (Y)
Driver Side Airbag Timing
Driver Side Curtain Airbag Timing

Pole Instrumentation Data

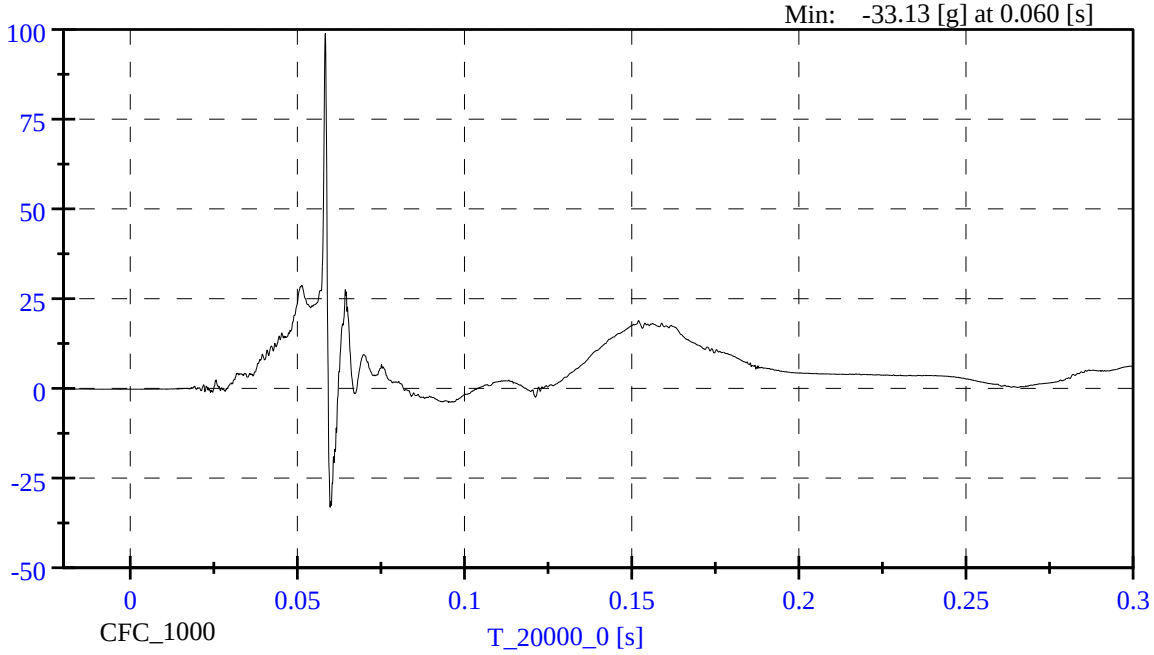
Load Cell Pole Barrier #1 Force (Y)
Load Cell Pole Barrier #2 Force (Y)
Load Cell Pole Barrier #3 Force (Y)
Load Cell Pole Barrier #4 Force (Y)
Load Cell Pole Barrier #5 Force (Y)
Load Cell Pole Barrier #6 Force (Y)
Load Cell Pole Barrier #7 Force (Y)
Load Cell Pole Barrier #8 Force (Y)


V1P1 Head x [g , CFC_1000]
Max: 4.38 [g] at 0.208 [s]
Min: -163.27 [g] at 0.059 [s]
25
0
-25
-50
-75
-100
-125
-150
-175
0
0.05
0.1
0.15
0.2
0.25
0.3
CFC_1000
T_20000_0 [s]


V1P1 Head y [g , CFC_1000]
Max: 341.17 [g] at 0.059 [s]
Min: -7.58 [g] at 0.199 [s]
350
300
250
200
150
100
50
0
-50
0
0.05
0.1
0.15
0.2
0.25
0.3
CFC_1000
T_20000_0 [s]

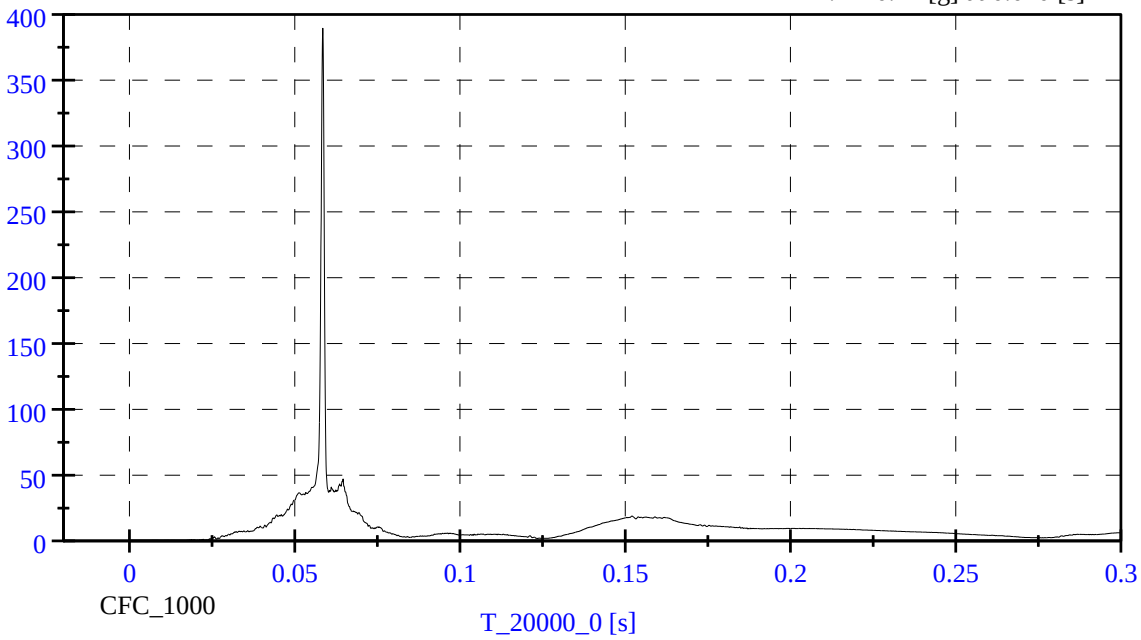
V1P1 Head z [g , CFC_1000]

Max: 98.86 [g] at 0.058 [s]
Min: -33.13 [g] at 0.060 [s]



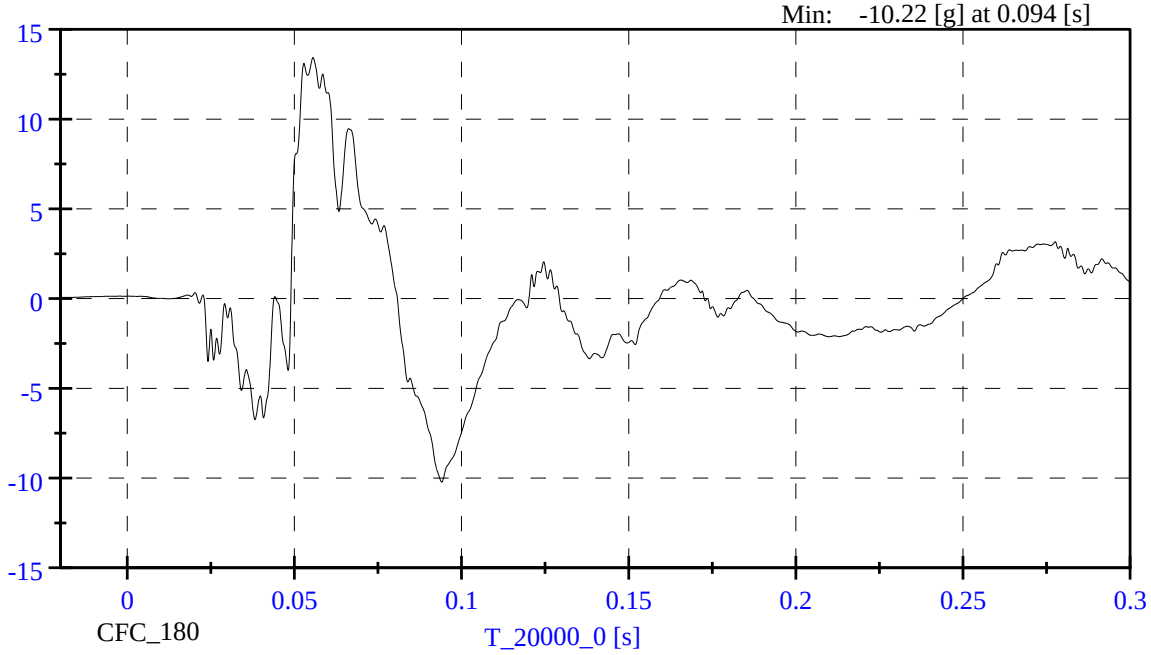
V1P1 Headform Resultant [g, CFC_1000]

Max: 389.45 [g] at 0.059 [s]
Min: 0.11 [g] at 0.020 [s]



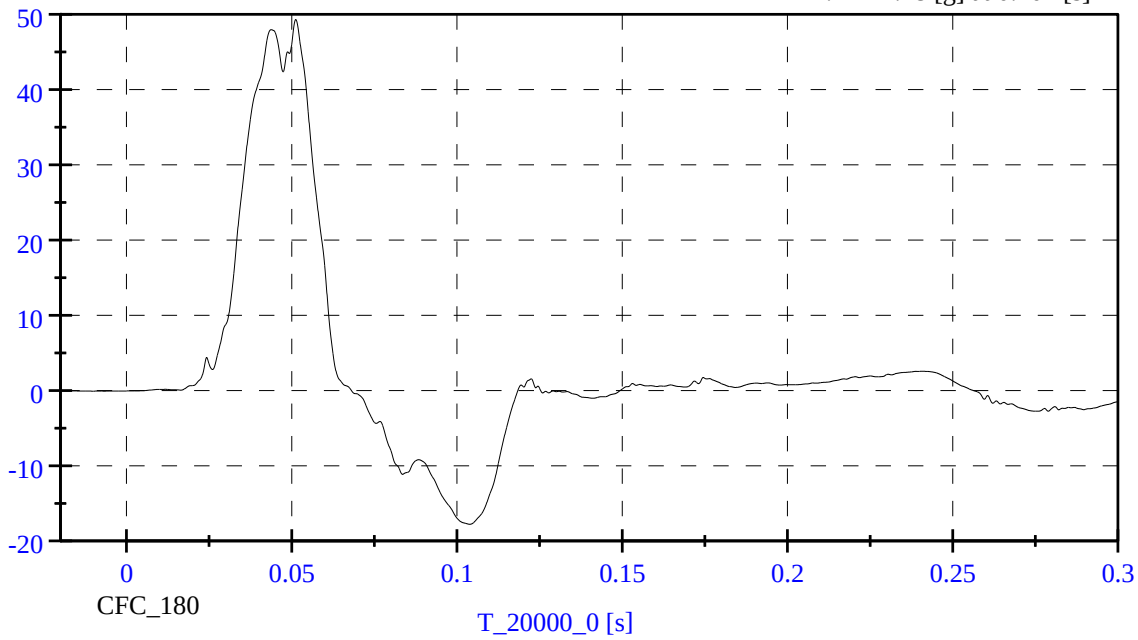
V1P1 Lower Spine T12 x [g , CFC_180]

Max: 13.44 [g] at 0.056 [s]
Min: -10.22 [g] at 0.094 [s]



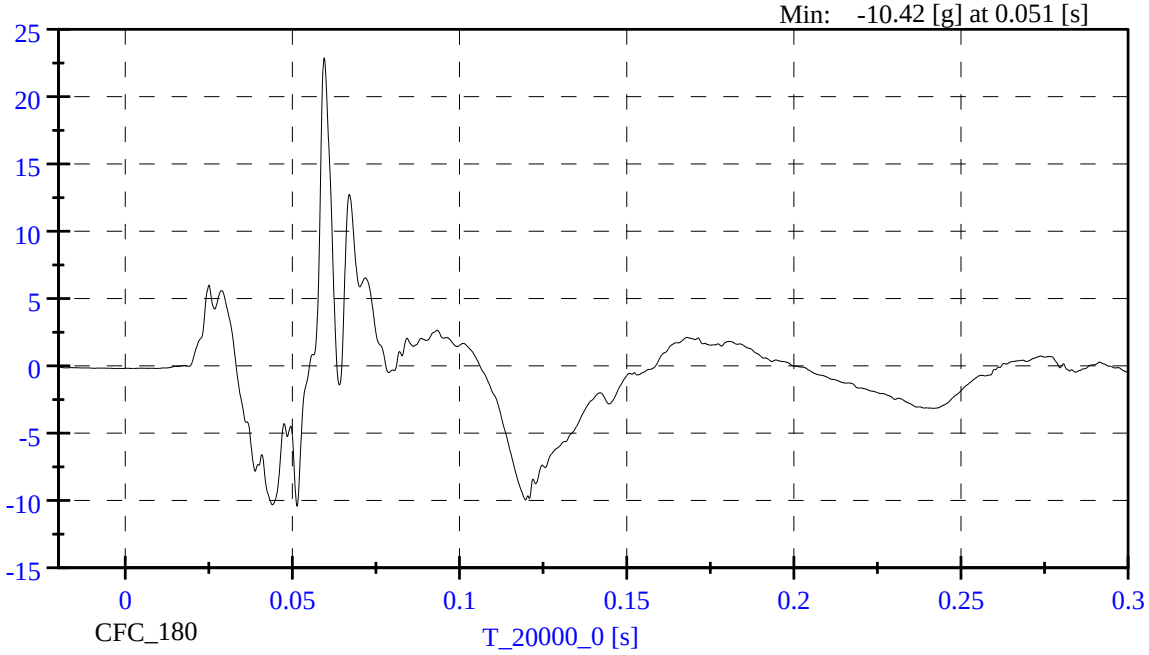
V1P1 Lower Spine T12 y [g , CFC_180]

Max: 49.32 [g] at 0.051 [s]
Min: -17.78 [g] at 0.104 [s]



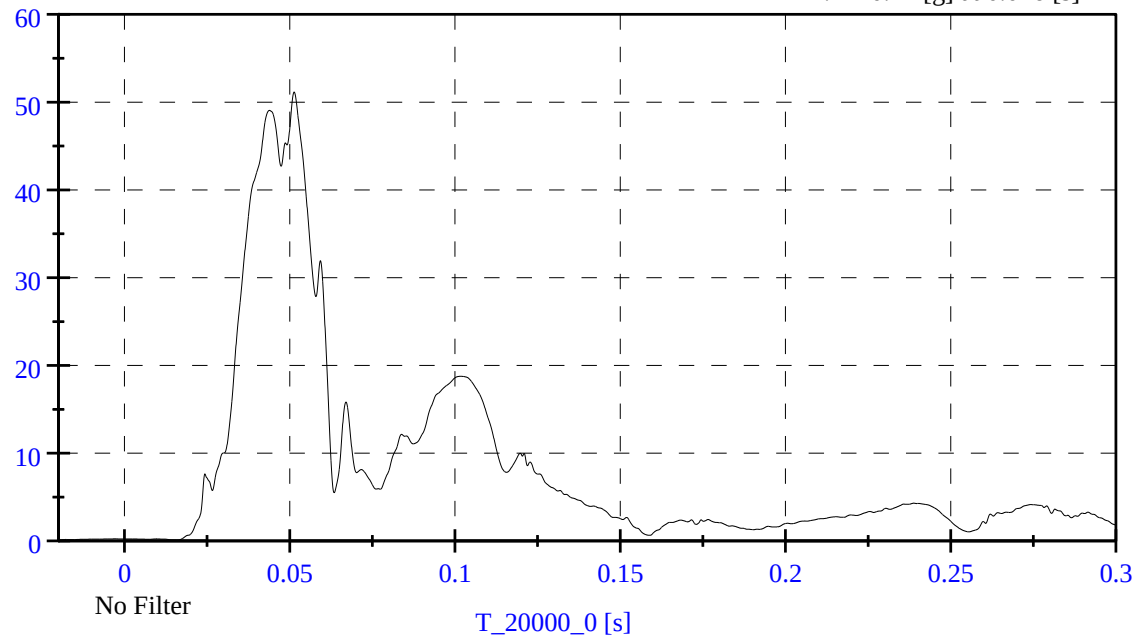
V1P1 Lower Spine T12 z [g , CFC_180]

Max: 22.88 [g] at 0.059 [s]
Min: -10.42 [g] at 0.051 [s]



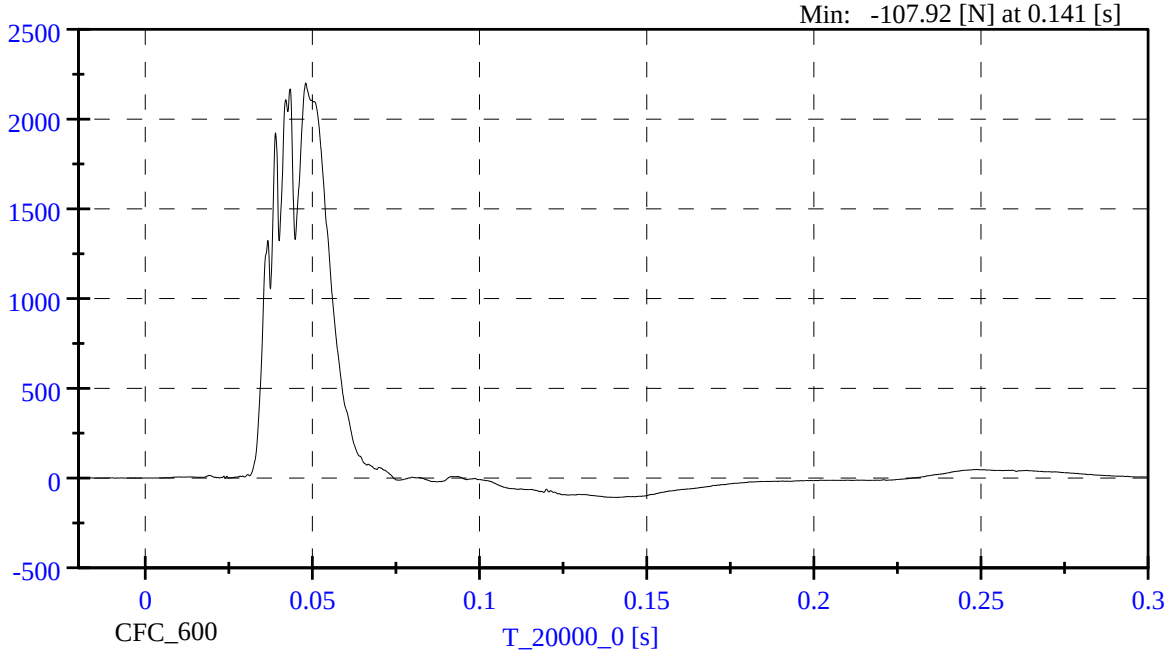
Input: V1P1 SPNL Ax F (69), V1P1 SPNL Ay F (70)...

Max: 51.16 [g] at 0.051 [s]
Min: 0.11 [g] at 0.016 [s]



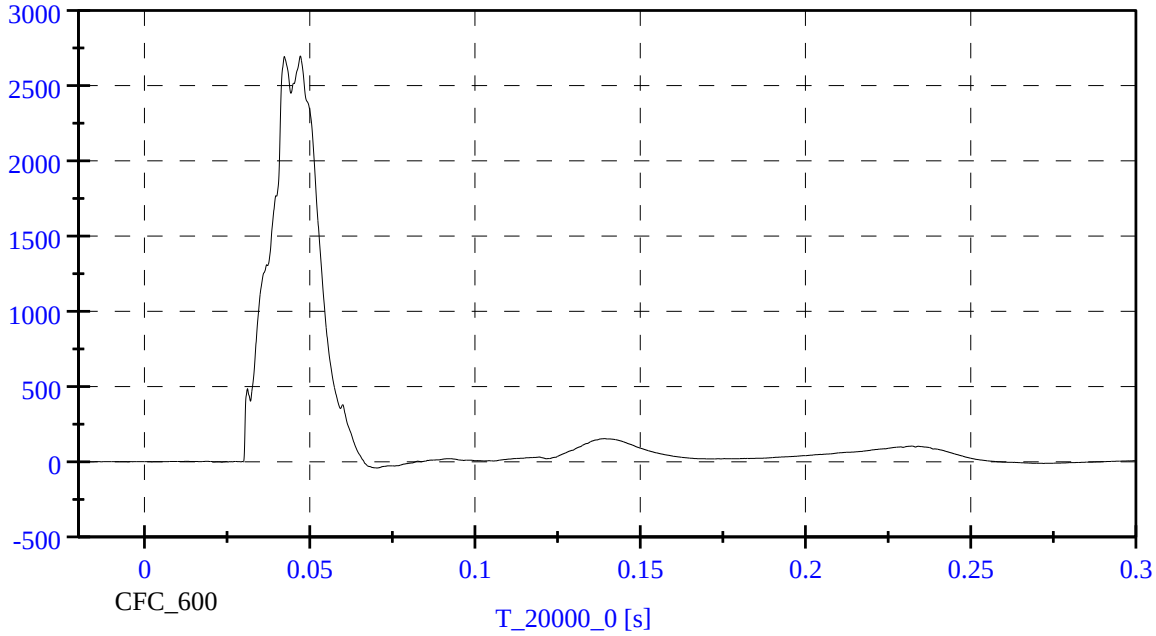
V1P1 Iliac Wing Force [N , CFC_600]

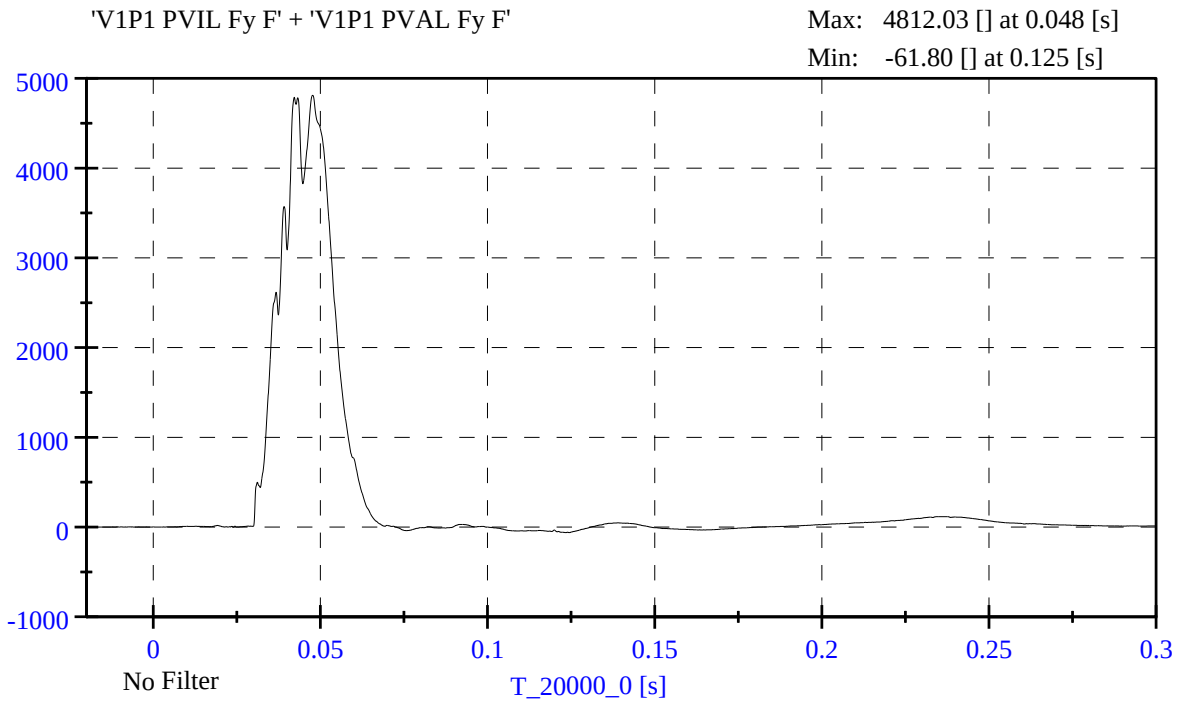
Max: 2201.13 [N] at 0.048 [s]
Min: -107.92 [N] at 0.141 [s]



V1P1 Acetabulum Force [N , CFC_600]

Max: 2696.41 [N] at 0.047 [s]
Min: -41.63 [N] at 0.070 [s]




'V1P1 PVIL Fy F' + 'V1P1 PVAL Fy F'
Max: 4812.03 [] at 0.048 [s]
Min: -61.80 [] at 0.125 [s]
5000
4000
3000
2000
1000
0
-1000
0
0.05
0.1
0.15
0.2
0.25
0.3
No Filter
T_20000_0 [s]

APPENDIX C

DUMMY CALIBRATION DATA

CALIBRATION TEST RESULTS

PRE-TEST

SID-IIs No: DG8012

CONFIGURED FOR LEFT SIDE IMPACT

Calspan - Transportation Research Group
www.calspan.com
4455 Genesee Street, Buffalo, New York 14225 - Phone (716)632-7500

SID-IIsD External Measurements

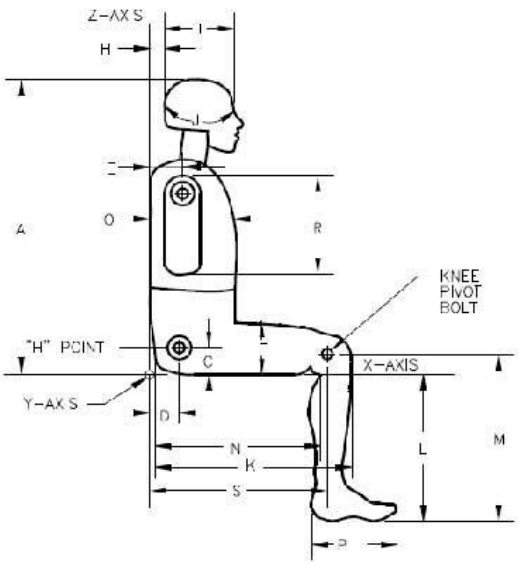
NHTSA ATD S/N DG8012

Symbol	Description	Specification	Results	Pass
		mm	mm	
A	Sitting Height	772.0 - 788.0	784	Yes
B	Shoulder Pivot Height	437.0 - 453.0	444	Yes
C	H-Point Height	79.0 - 89.0	85	Yes
D	H-Point from Seat Back	141.0 - 151.0	148	Yes
E	Shoulder Pivot from Backline	97.0 - 107.0	100	Yes
F	Thigh Clearance	119.0 - 135.0	132	Yes
G	Head Breadth	140.0 - 148.0	145	Yes
H	Head Back from Backline	40.0 - 46.0	43	Yes
I	Head Depth	178.0 - 188.0	187	Yes
J	Head Circumference	541.0 - 551.0	548	Yes
K	Buttock to Knee Length	514.0 - 540.0	530	Yes
L	Popliteal Height	343.0 - 369.0	359	Yes
M	Knee Pivot to Floor Height	393.0 - 409.0	402	Yes
N	Buttock Popliteal Length	416.0 - 442.0	434	Yes
O	Chest Depth without Jacket	195.0 - 211.0	204	Yes
P	Foot Length (right)	216.0 - 232.0	223	Yes
Q	Hip Breadth	313.0 - 323.0	315	Yes
R	Arm Length	249.0 - 259.0	257	Yes
S	Knee Joint to Seat back	478.0 - 493.0	490	Yes
V	Shoulder Width (only one arm installed)	341.0 - 357.0	354	Yes
W	Foot Width (right)	78.0 - 94.0	84	Yes
Y	Chest Circumference with Jacket	851.0 - 881.0	870	Yes
Z	Waist Circumference	761.0 - 791.0	782	Yes

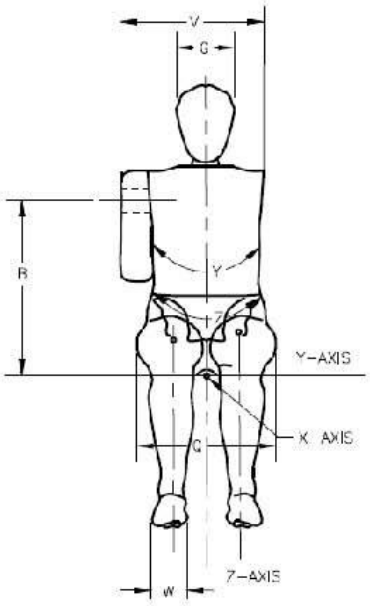
Technician : AR

Date: 9/30/2011

SID-IIsD External Dimension Reference Diagram



SIDE VIEW



FRONT VIEW

Calspan - Transportation Research Group
www.calspan.com
4455 Genesee Street, Buffalo, New York 14225 - Phone (716)632-7500

VERIFICATION REPORT

Test Name:	**Head Drop**	Revision:	**12/14/2006**
Sub Test Name:		Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/7/2011**
Test Number:	**1**	Test Time:	**11:32:57 AM**

Component Part Number	Component Serial Number
Head Skin - 180-1002	**1362**

Test Parameters	Test Specifications			Test Results		
Temperature	20.6	--	22.2	**21.4**	deg C	P
Humidity	10	--	70	**34**	%RH	P
Resultant Acceleration	115.0	--	137.0	**120.9**	g	P
Oscillation	0.0	--	15.0	**2.4**	%	P
Fore-Aft Acceleration	-15.0	--	15.0	**5.5**	g	P

All test parameters are within specifications

Technician: **A. Rudniski**

Supervisor: **D. Travale**

Test ID: Test Time: **11:32:57 AM** Test Date: **10/7/2011**

VERIFICATION REPORT

REFERENCE EQUIPMENT

Manufacturer	Model	Serial Number	Calibration Date
Endevco	**7264-2000**	**P51885**	**9/30/2011**
Endevco	**7264-2000**	**P58839**	**9/30/2011**
Endevco	**7264-2000**	**P51991**	**9/30/2011**

Test ID: Test Time: **11:32:57 AM** Test Date: **10/7/2011**

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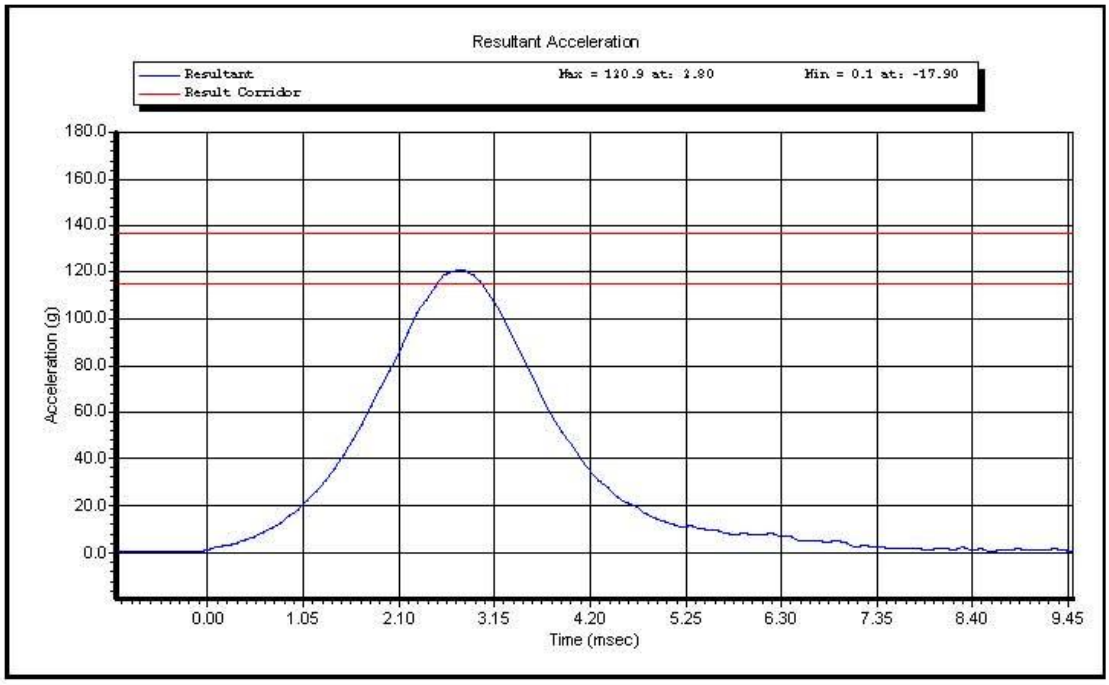
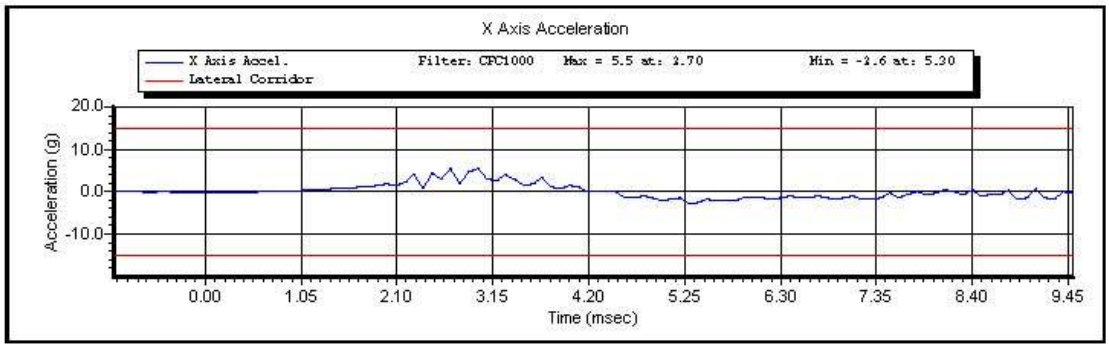
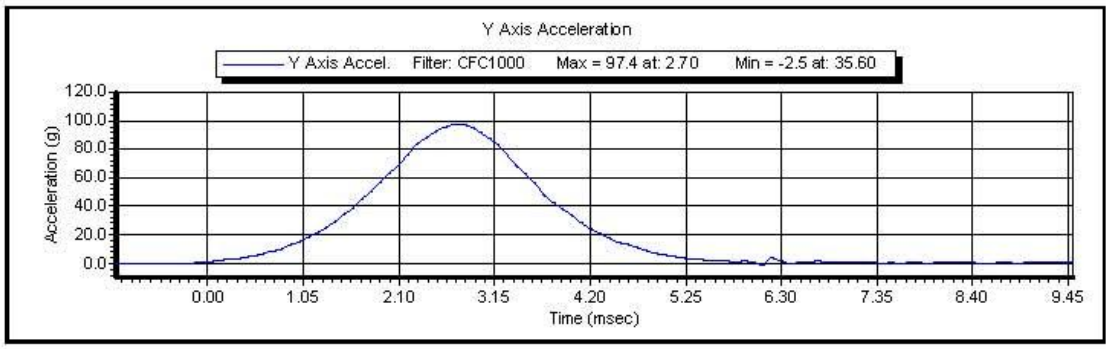
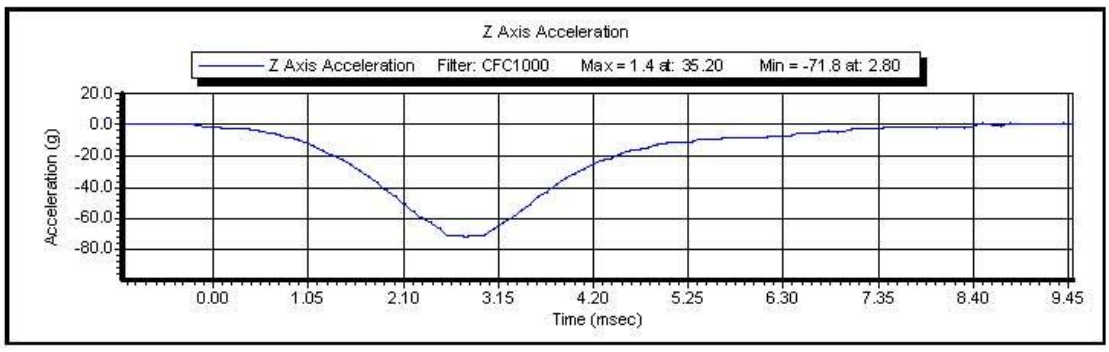
4455 Genesee Street, Buffalo, New York 14225 - Phone (716)632-7500

Test Name:	**Head Drop**	Revision:	**12/14/2006**
Sub Test Name:		Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/7/2011**
Test Number:	**1**	Test Time:	**11:32:57 AM**









Test ID: Test Time: **11:32:57 AM** Test Date: **10/7/2011**

Calspan - Transportation Research Group
www.calspan.com 4455 Genesee Street, Buffalo, New York 14225 - Phone (716)632-7500

VERIFICATION REPORT

Test Name:	**Neck Pendulum**	Revision:	**8/24/2009**
Sub Test Name:	**Left Side**	Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**9/30/2011**
Test Number:	**2**	Test Time:	**11:05:11 AM**

Component Part Number	Component Serial Number
Neck - 180-2000	**DG7061**

Test Parameters	Test Specifications			Test Results		
Temperature	20.6	--	22.2	**21.7** deg C		P
Humidity	10	--	70	**50** %RH		P
Velocity	5.51	--	5.63	**5.55** m/s		P
Pendulum Impulse at 10 ms	2.20	--	2.80	**2.38** m/s		P
Pendulum Impulse at 15 ms	3.30	--	4.10	**3.46** m/s		P
Pendulum Impulse at 20 ms	4.40	--	5.40	**4.65** m/s		P
Pendulum Impulse at 25 ms	5.40	--	6.10	**5.55** m/s		P
Pendulum Impulse between 25 and 100 ms	5.50	--	6.20	**5.79** m/s		P
Max D Plane Rotation	71.0	--	81.0	**76.2** degrees		P
Time at Max Rotation	50.0	--	70.0	**63.1** ms		P
Moment about OC	-44.0	--	-36.0	**-38.7** Nm		P
Moment Decay to Zero	102.0	--	126.0	**116.3** ms		P

All test parameters are within specifications

Technician: **A. Rudniski**

Supervisor: **D. Travale**

Test ID: Test Time: **11:05:11 AM** Test Date: **9/30/2011**

VERIFICATION REPORT

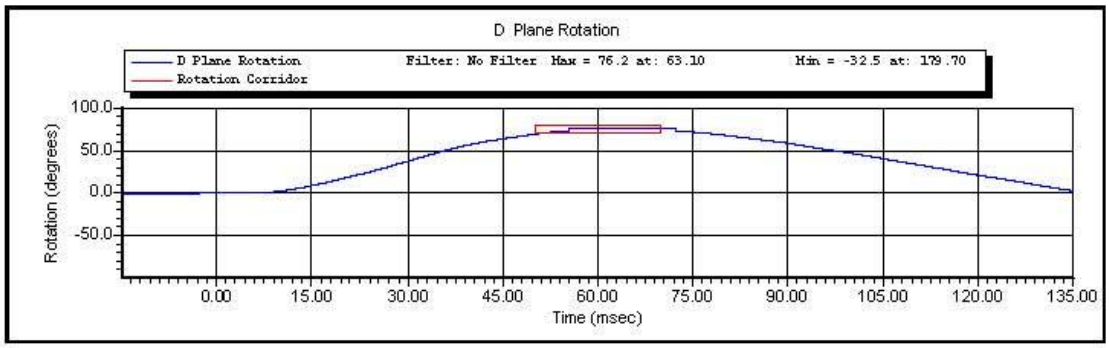
REFERENCE EQUIPMENT

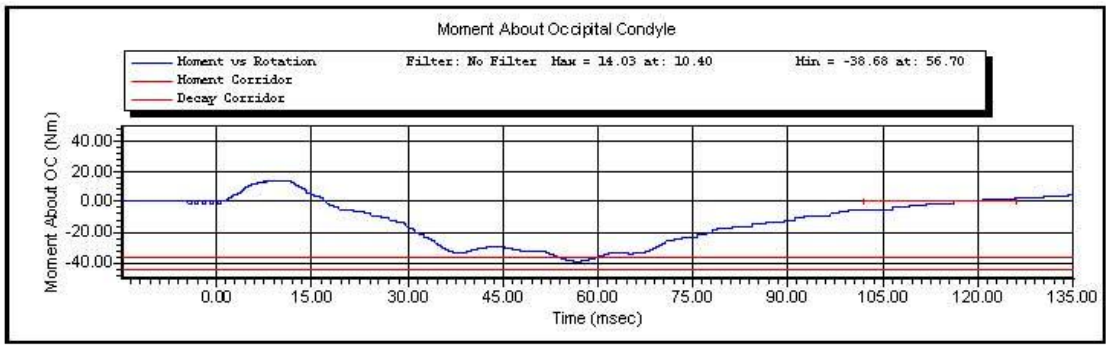
Manufacturer	Model	Serial Number	Calibration Date
DentonATD	**Velocity Trap**	**1**	**1/11/2011**
Endevco	**7231CT**	**C16510**	**4/21/2011**
Denton	**1716A**	**LC-2192Fy**	**8/31/2011**
Denton	**1716A**	**LC-2192Mx**	**8/31/2011**
DentonATD	**78051-342**	**184**	**5/8/2011**
DentonATD	**78051-342**	**174**	**5/8/2011**
DentonATD	**78051-342**	**185**	**5/8/2011**

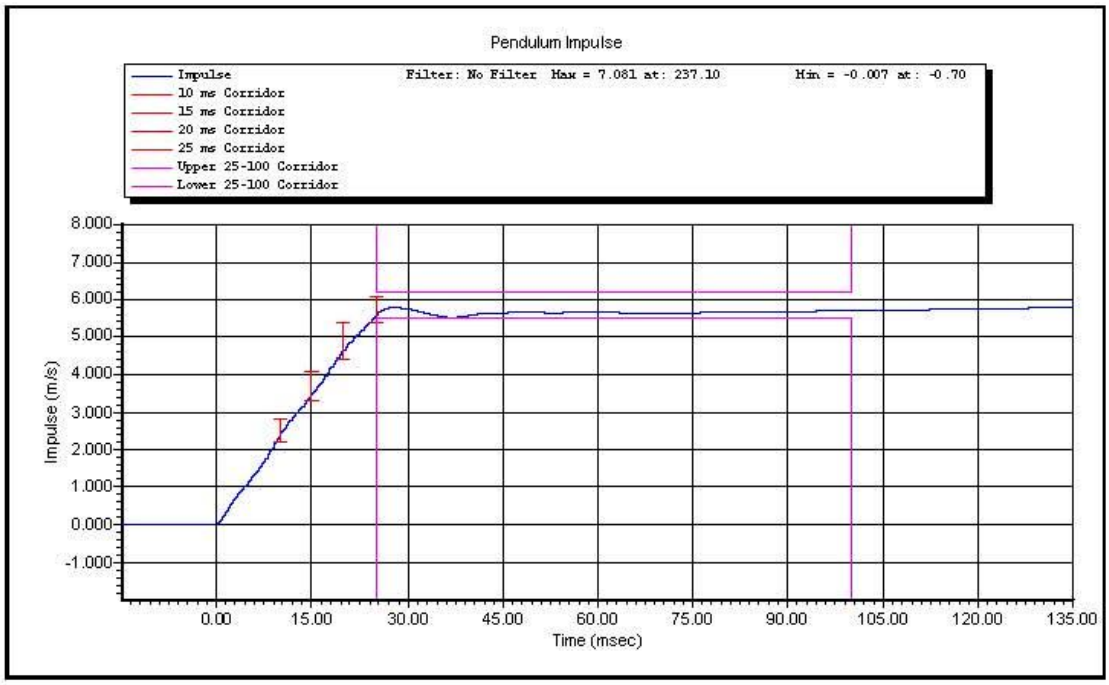
Test ID: Test Time: **11:05:11 AM** Test Date: **9/30/2011**

Calspan - Transportation Research Group
www.calspan.com
4455 Genesee Street, Buffalo, New York 14225 - Phone (716)632-7500

Test Name:	**Neck Pendulum**	Revision:	**8/24/2009**
Sub Test Name:	**Left Side**	Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**9/30/2011**
Test Number:	**2**	Test Time:	**11:05:11 AM**







Test ID: Test Time: **11:05:11 AM** Test Date: **9/30/2011**

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VERIFICATION REPORT

Test Name:	**Shoulder Impact**	Revision:	**8/24/2009**
Sub Test Name:		Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/6/2011**
Test Number:	**1**	Test Time:	**4:41:29 PM**

Component Part Number	Component Serial Number
Left Arm 180-6011-1	**DG3210**
Shoulder Rib 180-3355	**DG6997**
Shoulder Plug 180-6019	**n/a**

Test Parameters	Test Specifications			Test Results		
Temperature	20.6	--	22.2	**21.20**	deg C	P
Humidity	10.0	--	70.0	**35.0**	%RH	P
Velocity	4.20	--	4.40	**4.33**	m/s	P
Probe Acceleration	13.0	--	18.0	**15.0**	g	P
Shoulder Deflection	28.0	--	37.0	**29.5**	mm	P
T1 Acceleration	17.0	--	22.0	**19.7**	g	P

All test parameters are within specifications

Technician: **A. Rudniski**

Supervisor: **D. Travale**

Test ID: Test Time: **4:41:29 PM** Test Date: **10/6/2011**

VERIFICATION REPORT

REFERENCE EQUIPMENT

Manufacturer	Model	Serial Number	Calibration Date
DentonATD	**Velocity Trap**	**1**	**1/11/2011**
Endevco	**7264-2000**	**P18524**	**7/28/2011**
FTSS	**180-3881-1**	**DS-1845**	**9/1/2011**
Endevco	**7264-2000**	**P63561**	**10/3/2011**

Test ID: Test Time: **4:41:29 PM** Test Date: **10/6/2011**

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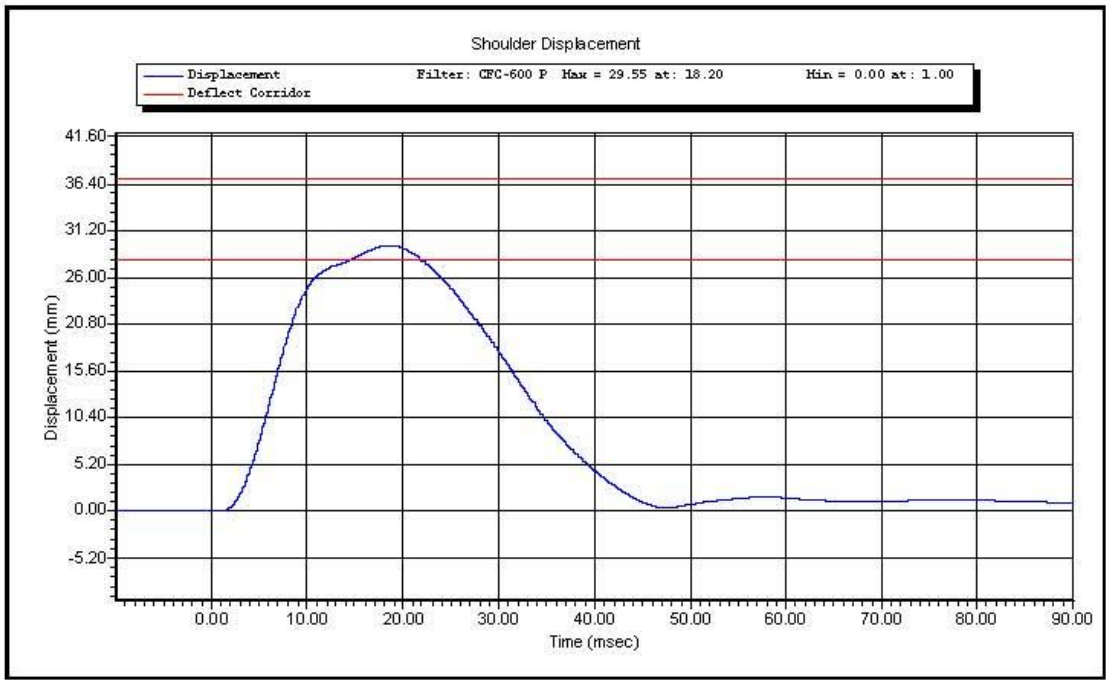
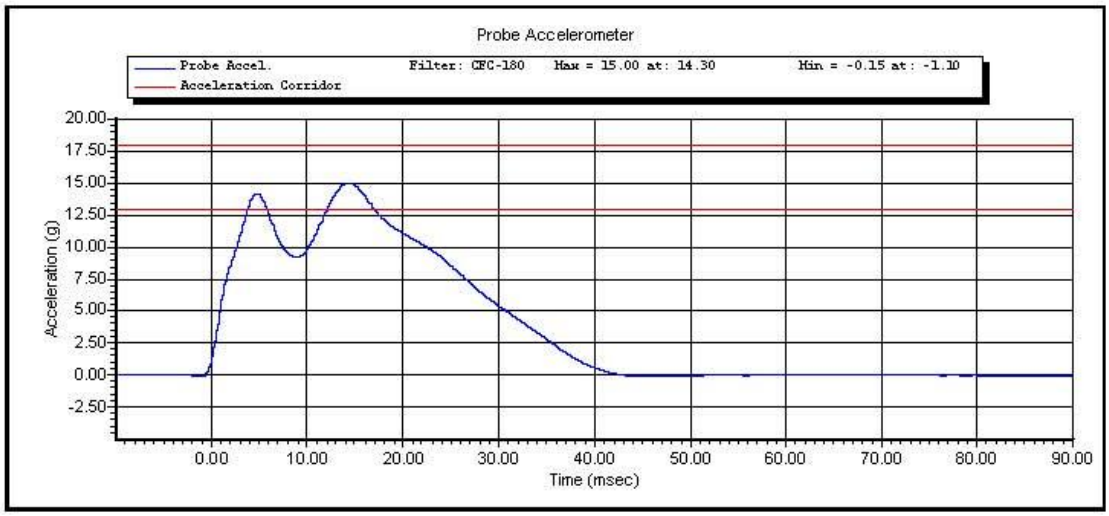
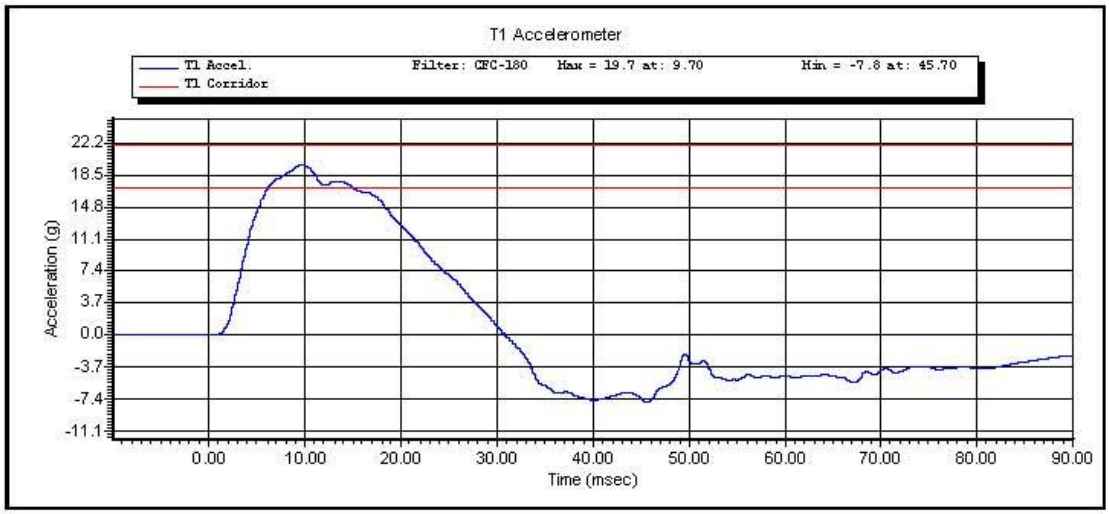
Test Name:	**Shoulder Impact**	Revision:	**8/24/2009**
Sub Test Name:		Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/6/2011**
Test Number:	**1**	Test Time:	**4:41:29 PM**







Test ID: Test Time: **4:41:29 PM** Test Date: **10/6/2011**

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VERIFICATION REPORT

Test Name:	**Thorax Impact with Arm**	Revision:	**8/24/2009**
Sub Test Name:		Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/6/2011**
Test Number:	**1**	Test Time:	**4:06:31 PM**

Component Part Number	Component Serial Number
Thorax Ribs 1, 2, 3 180-3362	**DG6080, DG6081, DG7543**
Shoulder Rib 180-3355	**DG6997**
Left Arm 180-6011-1	**DG3210**

Test Parameters	Test Specifications			Test Results		
Temperature	20.6	--	22.2	**21.1**	deg C	P
Humidity	10	--	70	**34**	%RH	P
Velocity	6.60	--	6.80	**6.68**	m/s	P
Probe Acceleration after 5ms	30.0	--	36.0	**32.9**	g	P
Upper Thorax Rib Deflection	25.0	--	32.0	**27.6**	mm	P
Mid Thorax Rib Deflection	30.0	--	36.0	**31.7**	mm	P
Lower Thorax Rib Deflection	32.0	--	38.0	**33.7**	mm	P
Upper Spine Acceleration ("y")	34.0	--	43.0	**40.9**	g	P
Lower Spine Acceleration ("y")	29.0	--	37.0	**32.4**	g	P
Shoulder Deflection	31.0	--	40.0	**34.7**	mm	P

All test parameters are within specifications

Technician: **A. Rudniski**

Supervisor: **D. Travale**

Test ID: Test Time: **4:06:31 PM** Test Date: **10/6/2011**

VERIFICATION REPORT

REFERENCE EQUIPMENT

Manufacturer	Model	Serial Number	Calibration Date
DentonATD	Velocity Trap	1	1/11/2011
Endevco	7264-2000	P18524	7/28/2011
FTSS	180-3881-1	DS-1849	9/1/2011
FTSS	180-3881-1	DS-1857	9/1/2011
FTSS	180-3881-1	DS-1859	9/1/2011
Endevco	7264-2000	P63561	10/3/2011
Endevco	7264-2000	P58796	10/5/2011
FTSS	180-3881-1	DS-1845	9/1/2011

Test ID: Test Time: **4:06:31 PM** Test Date: **10/6/2011**

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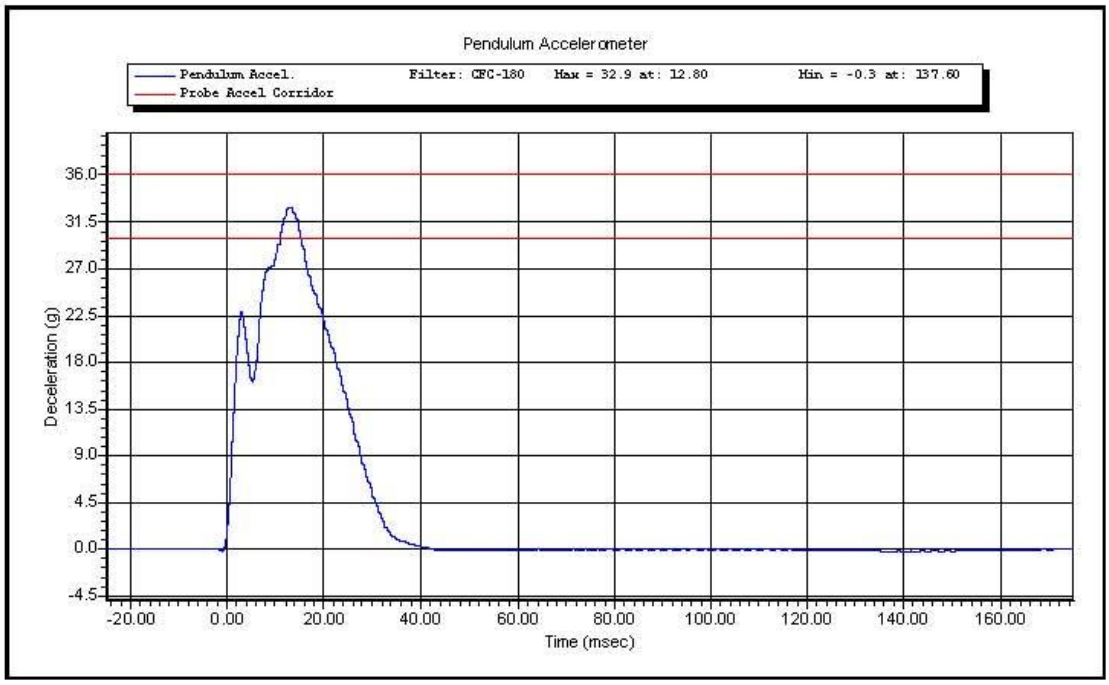
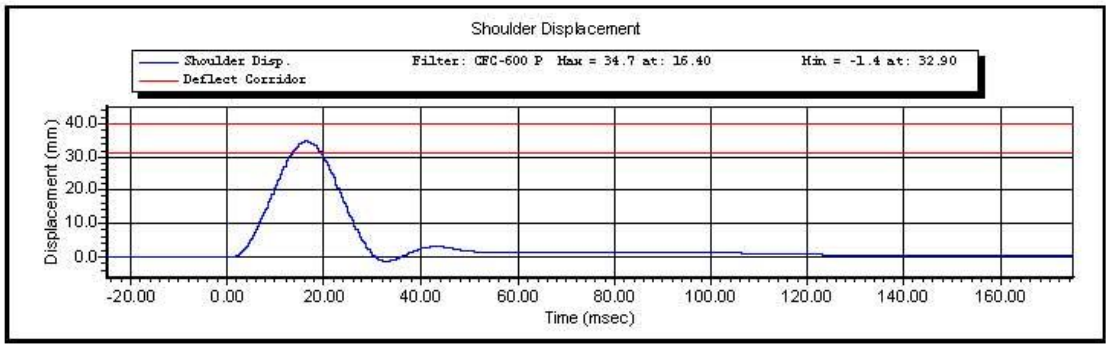
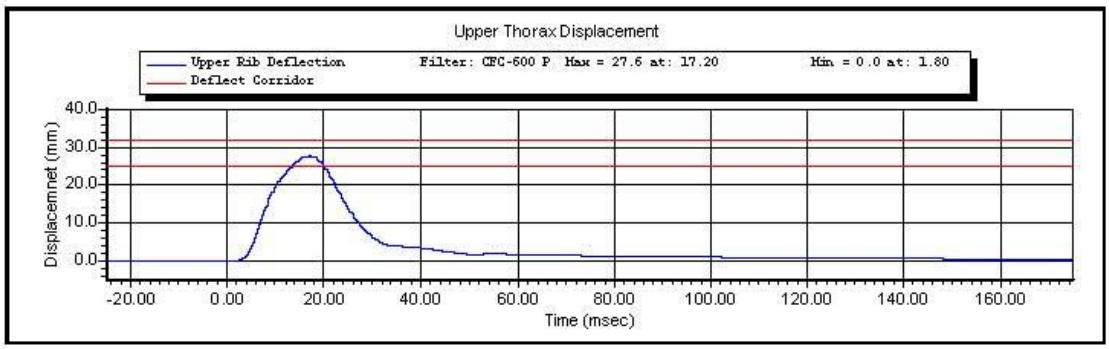
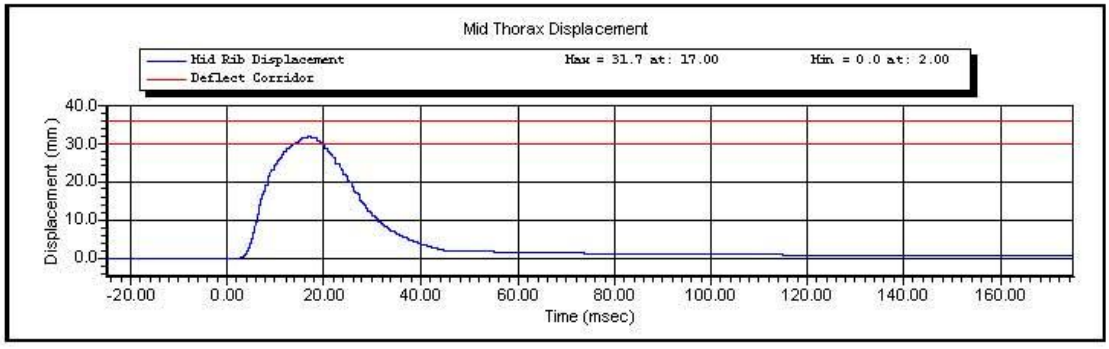
Test Name:	**Thorax Impact with Arm**	Revision:	**8/24/2009**
Sub Test Name:		Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/6/2011**
Test Number:	**1**	Test Time:	**4:06:31 PM**

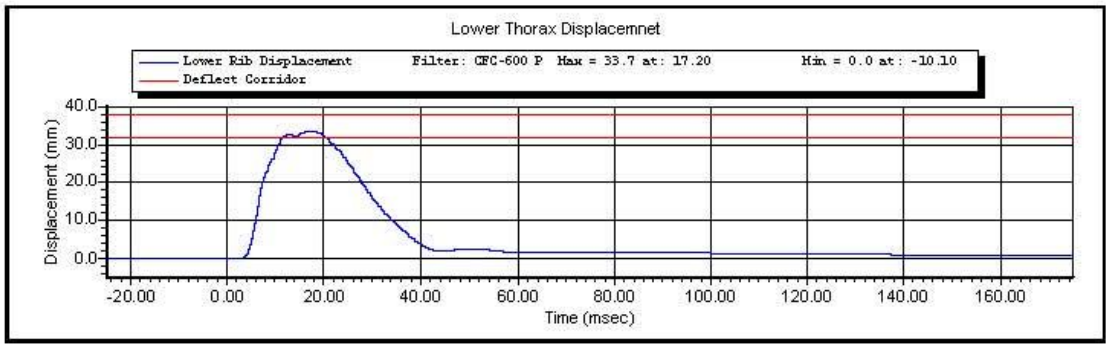


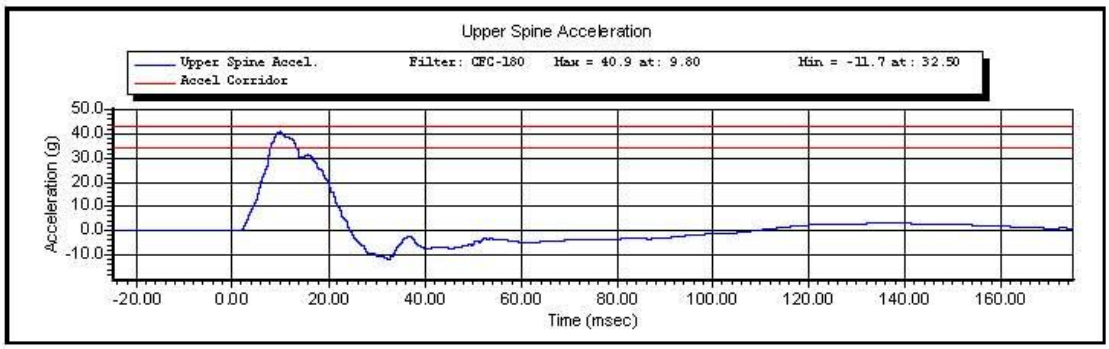


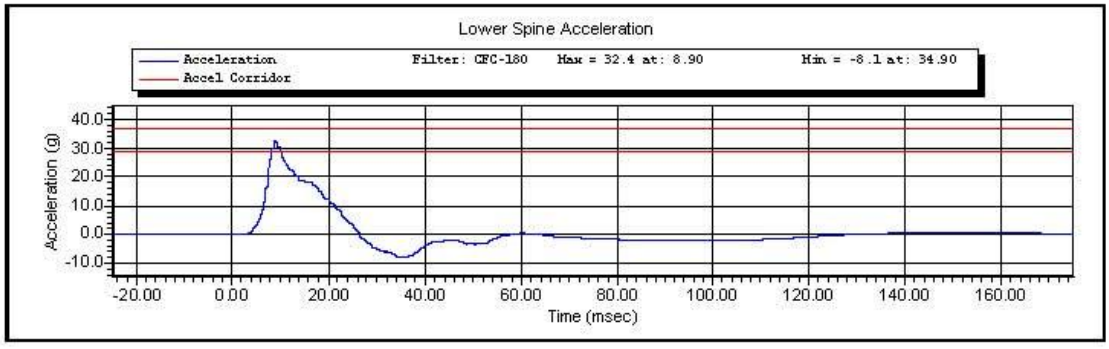




Test ID: Test Time: **4:06:31 PM** Test Date: **10/6/2011**







Test ID: Test Time: **4:06:31 PM** Test Date: **10/6/2011**

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VERIFICATION REPORT

Test Name:	**Thorax Impact without Arm**	Revision:	**8/24/2009**
Sub Test Name:		Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/6/2011**
Test Number:	**1**	Test Time:	**3:29:55 PM**

Component Part Number	Component Serial Number
Thorax Ribs 1, 2, 3	**DG6080, DG6081, DG7543**

Test Parameters	Test Specifications			Test Results		
Temperature	20.6	--	22.2	**21.1**	deg C	P
Humidity	10	--	70	**34**	%RH	P
Velocity	4.20	--	4.40	**4.33**	m/s	P
Probe Acceleration	14.0	--	18.0	**16.7**	g	P
Upper Thorax Rib Deflection	32.0	--	40.0	**36.6**	mm	P
Mid Thorax Rib Deflection	39.0	--	45.0	**42.0**	mm	P
Lower Thorax Rib Deflection	35.0	--	43.0	**40.0**	mm	P
Upper Spine Acceleration T1	13.0	--	17.0	**16.3**	g	P
Lower Spine Acceleration T12	7.0	--	11.0	**10.3**	g	P

All test parameters are within specifications

Technician: **A. Rudniski**

Supervisor: **D. Travale**

Test ID: Test Time: **3:29:55 PM** Test Date: **10/6/2011**

VERIFICATION REPORT

REFERENCE EQUIPMENT

Manufacturer	Model	Serial Number	Calibration Date
DentonATD	**Velocity Trap**	**1**	**1/11/2011**
Endevco	**7264-2000**	**P18524**	**7/28/2011**
FTSS	**180-3881-1**	**DS-1849**	**9/1/2011**
FTSS	**180-3881-1**	**DS-1857**	**9/1/2011**
FTSS	**180-3881-1**	**DS-1859**	**9/1/2011**
Endevco	**7264-2000**	**P63561**	**10/3/2011**
Endevco	**7264-2000**	**P58796**	**10/5/2011**

Test ID: Test Time: **3:29:55 PM** Test Date: **10/6/2011**

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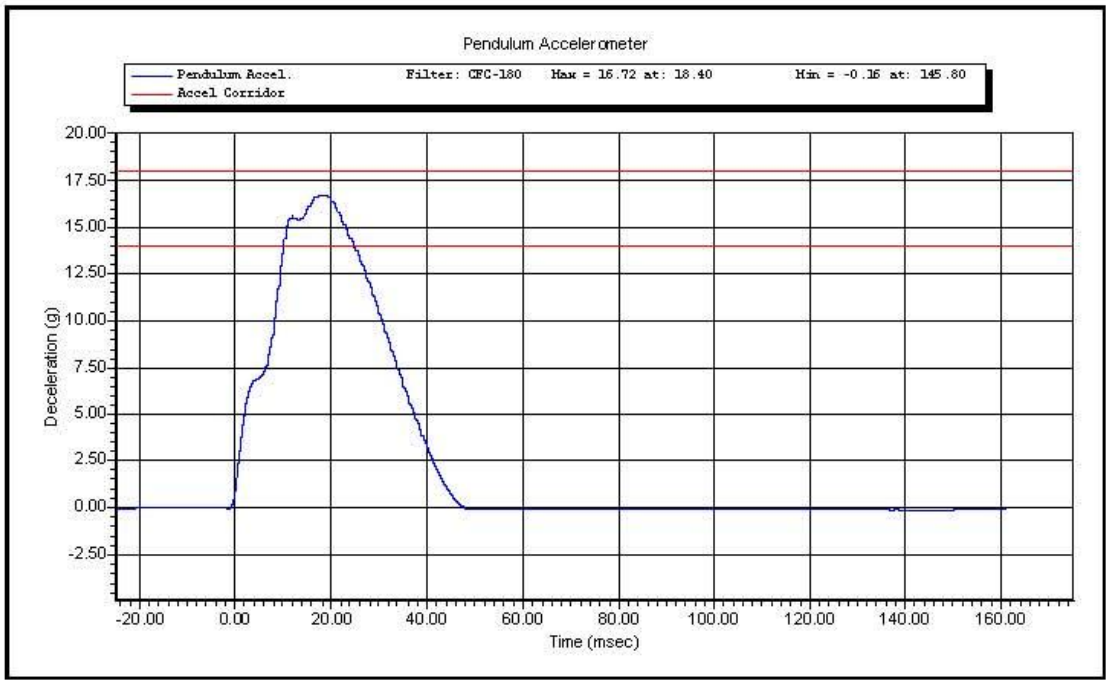
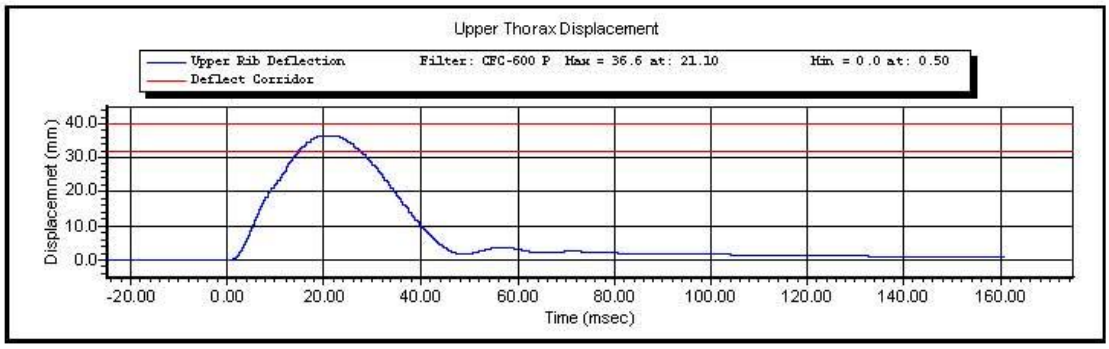
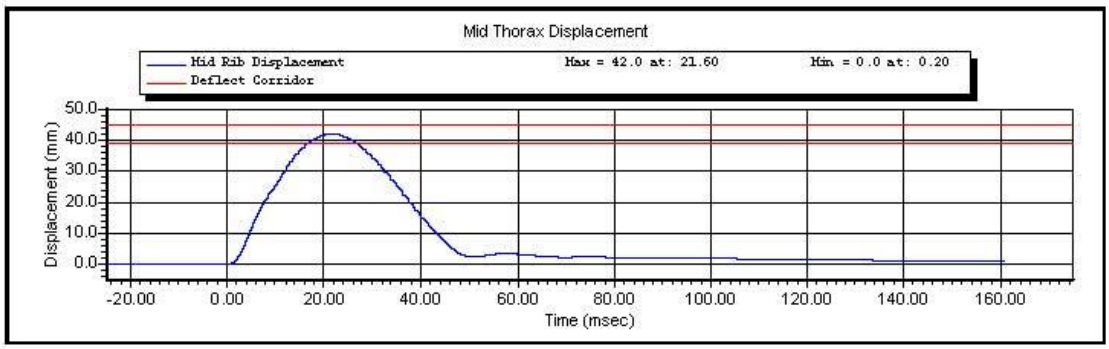
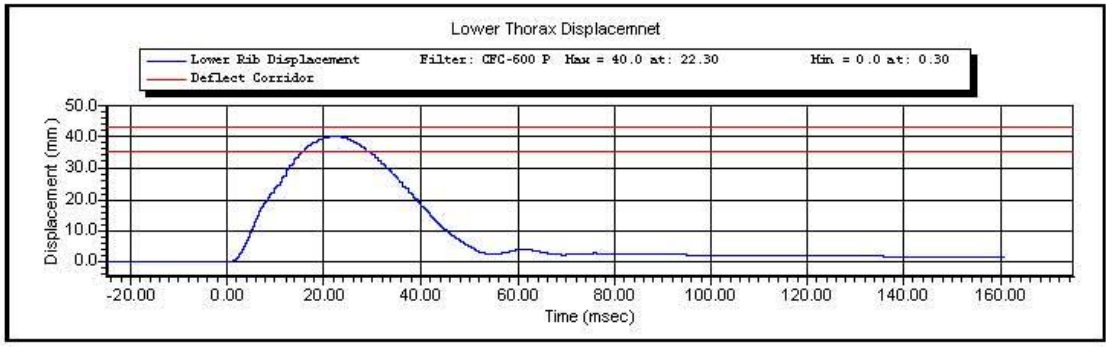
Test Name:	**Thorax Impact without Arm**	Revision:	**8/24/2009**
Sub Test Name:		Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/6/2011**
Test Number:	**1**	Test Time:	**3:29:55 PM**

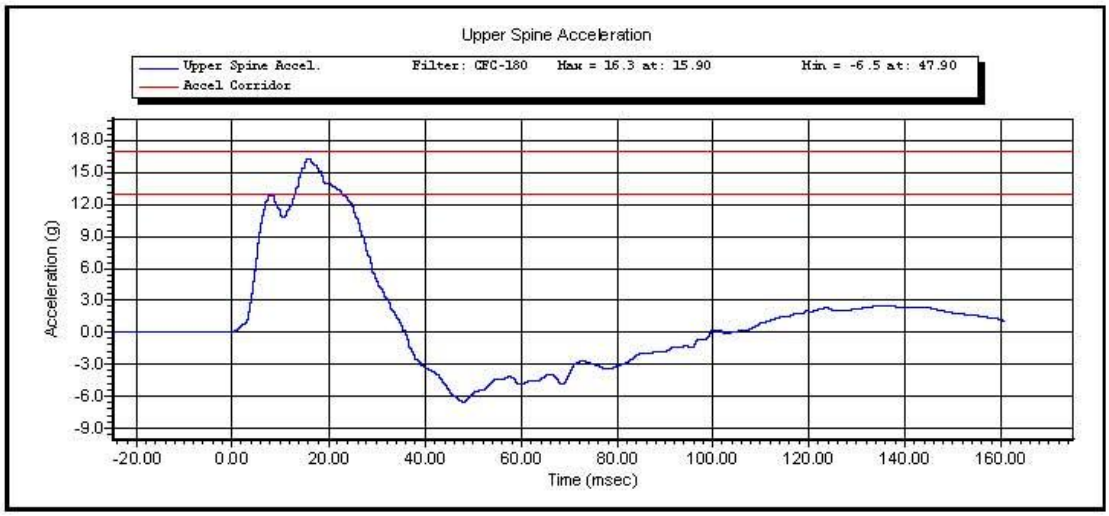


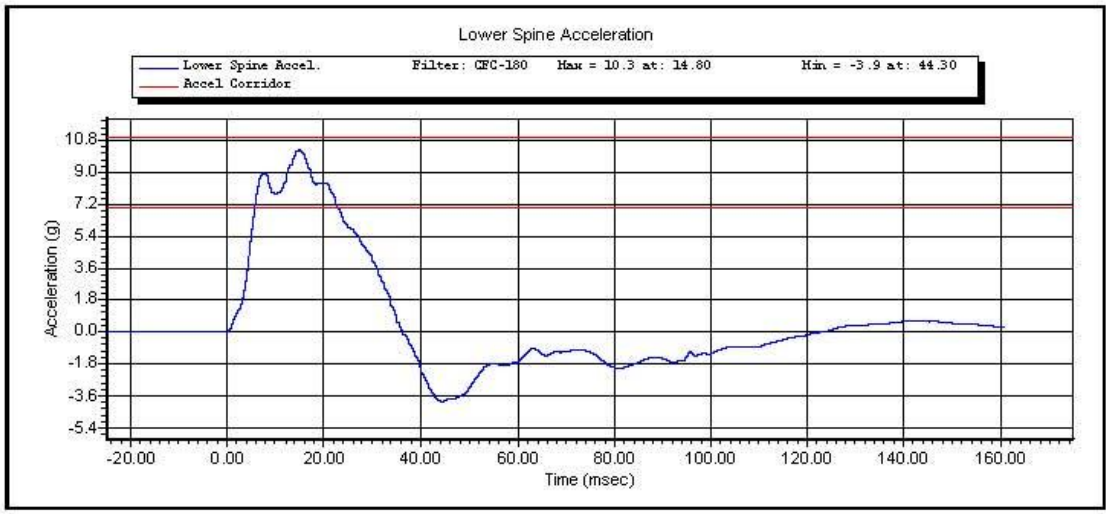






Test ID: Test Time: **3:29:55 PM** Test Date: **10/6/2011**





Test ID: Test Time: **3:29:55 PM** Test Date: **10/6/2011**

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VERIFICATION REPORT

Test Name:	**Abdominal Impact**	Revision:	**8/24/2009**
Sub Test Name:		Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/6/2011**
Test Number:	**1**	Test Time:	**3:08:20 PM**

Component Part Number	Component Serial Number
Thorax Ribs 4, 5	**DG7011, DG7012**

Test Parameters	Test Specifications			Test Results		
Temperature	20.6	--	22.2	**21.1** deg C		P
Humidity	10	--	70	**34** %RH		P
Velocity	4.20	--	4.40	**4.34** m/s		P
Probe Acceleration	12.0	--	16.0	**14.9** g		P
Upper Abdominal Rib Deflection	36.0	--	47.0	**42.6** mm		P
Lower Abdominal Rib Deflection	33.0	--	44.0	**38.3** mm		P
Lower Spine Acceleration - T12	9.0	--	14.0	**11.4** g		P

All test parameters are within specifications

Technician: **A. Rudniski**

Supervisor: **D. Travale**

VERIFICATION REPORT

REFERENCE EQUIPMENT

Manufacturer	Model	Serial Number	Calibration Date
DentonATD	**Velocity Trap**	**1**	**1/11/2011**
Endevco	**7264-2000**	**P18524**	**7/28/2011**
FTSS	**180-3881-1**	**DS-1860**	**9/1/2011**
FTSS	**180-3881-1**	**DS-1861**	**9/1/2011**
Endevco	**7264-2000**	**P58796**	**10/5/2011**

Test ID: Test Time: **3:08:20 PM** Test Date: **10/6/2011**

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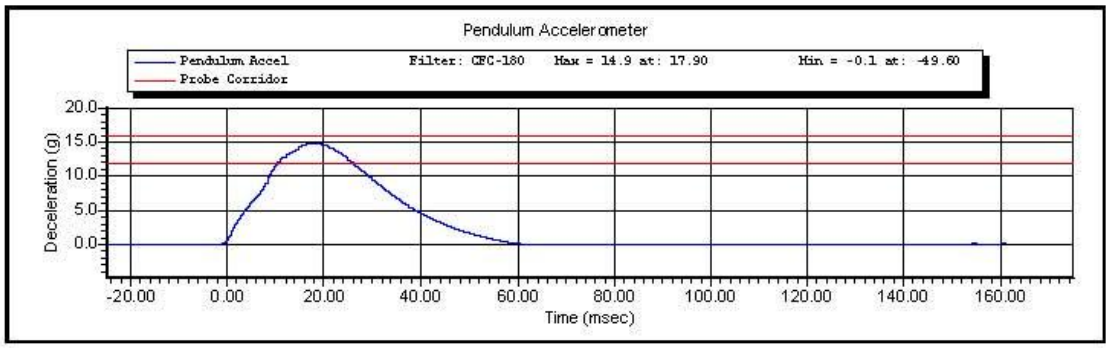
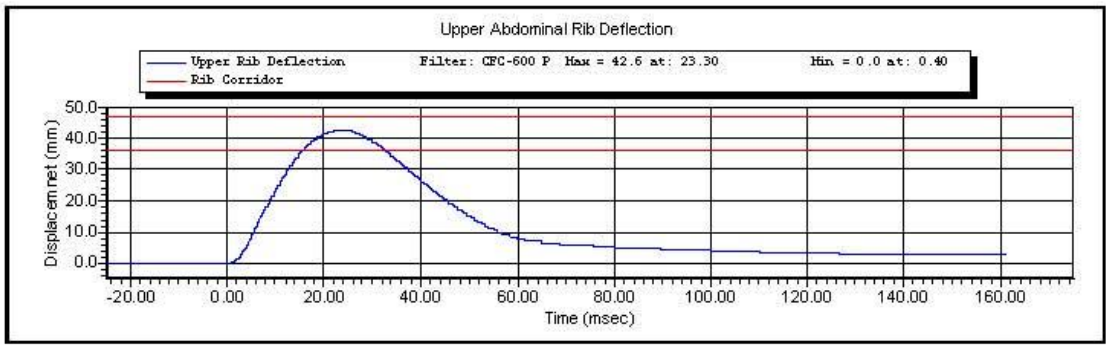
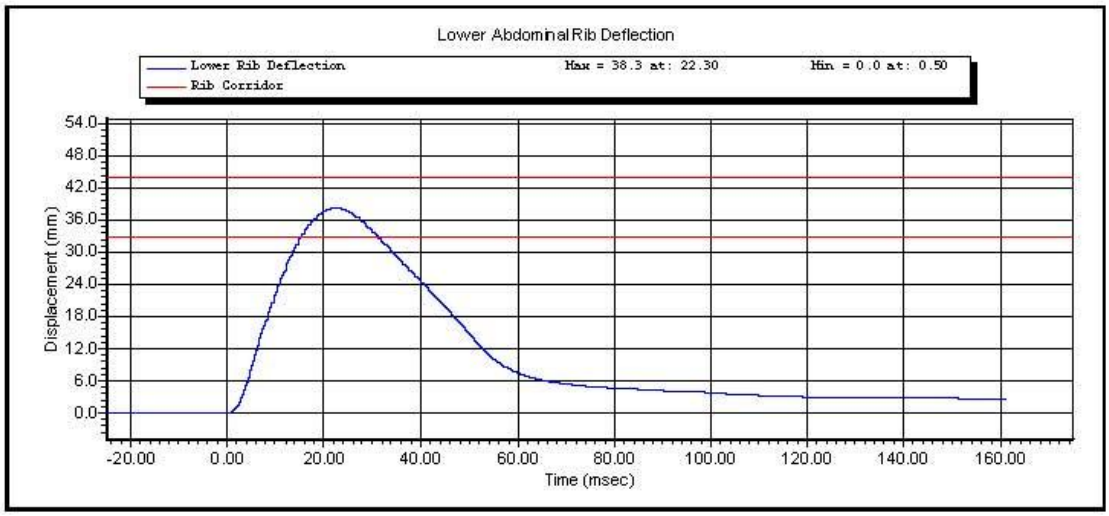
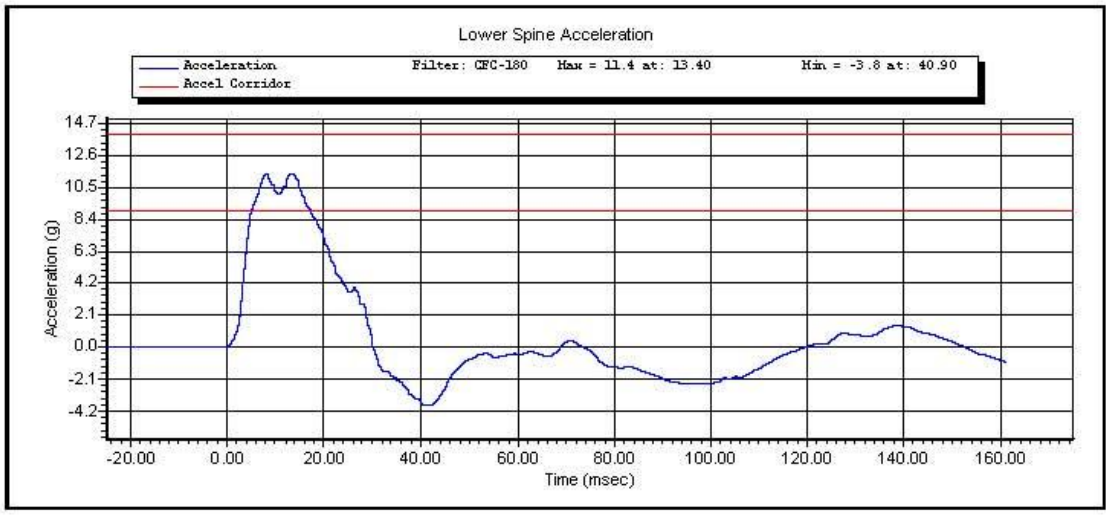
Test Name:	**Abdominal Impact**	Revision:	**8/24/2009**
Sub Test Name:		Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/6/2011**
Test Number:	**1**	Test Time:	**3:08:20 PM**



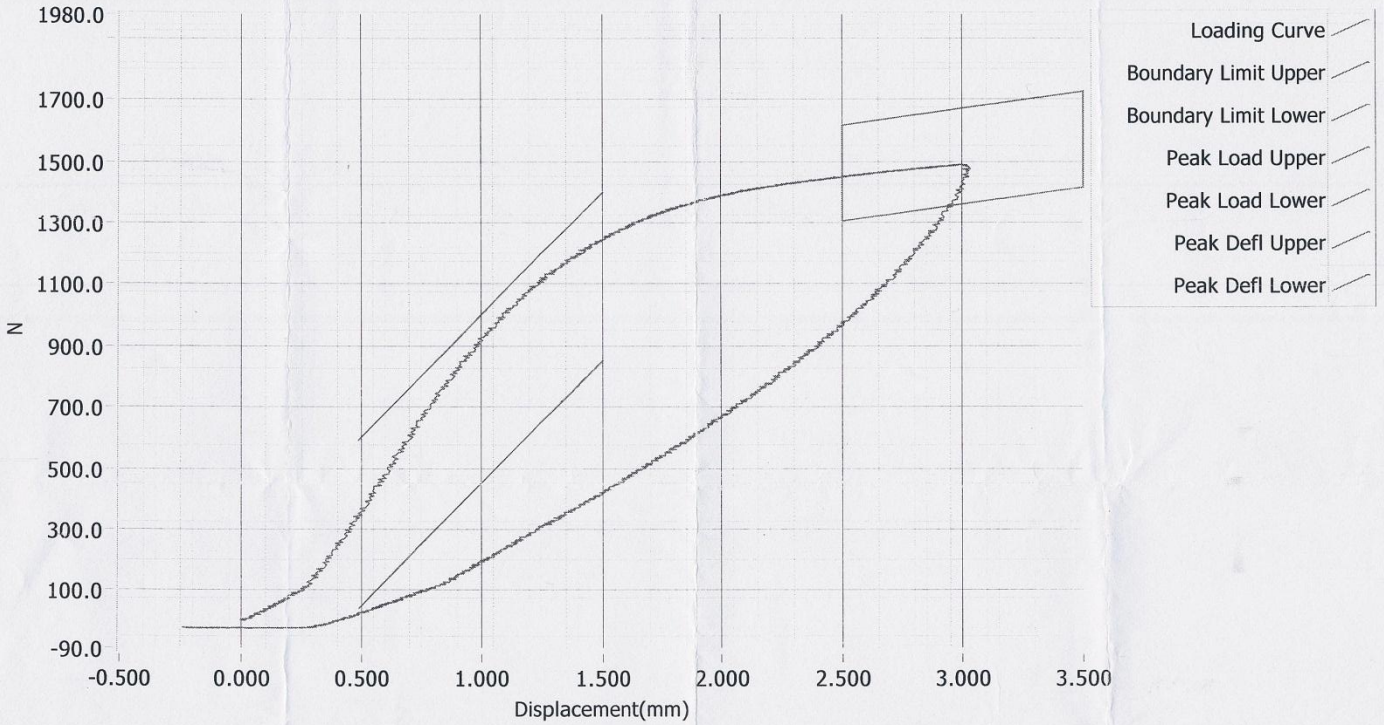






Test ID: Test Time: **3:08:20 PM** Test Date: **10/6/2011**

Resultant Data - SIDIIs Plug Compression

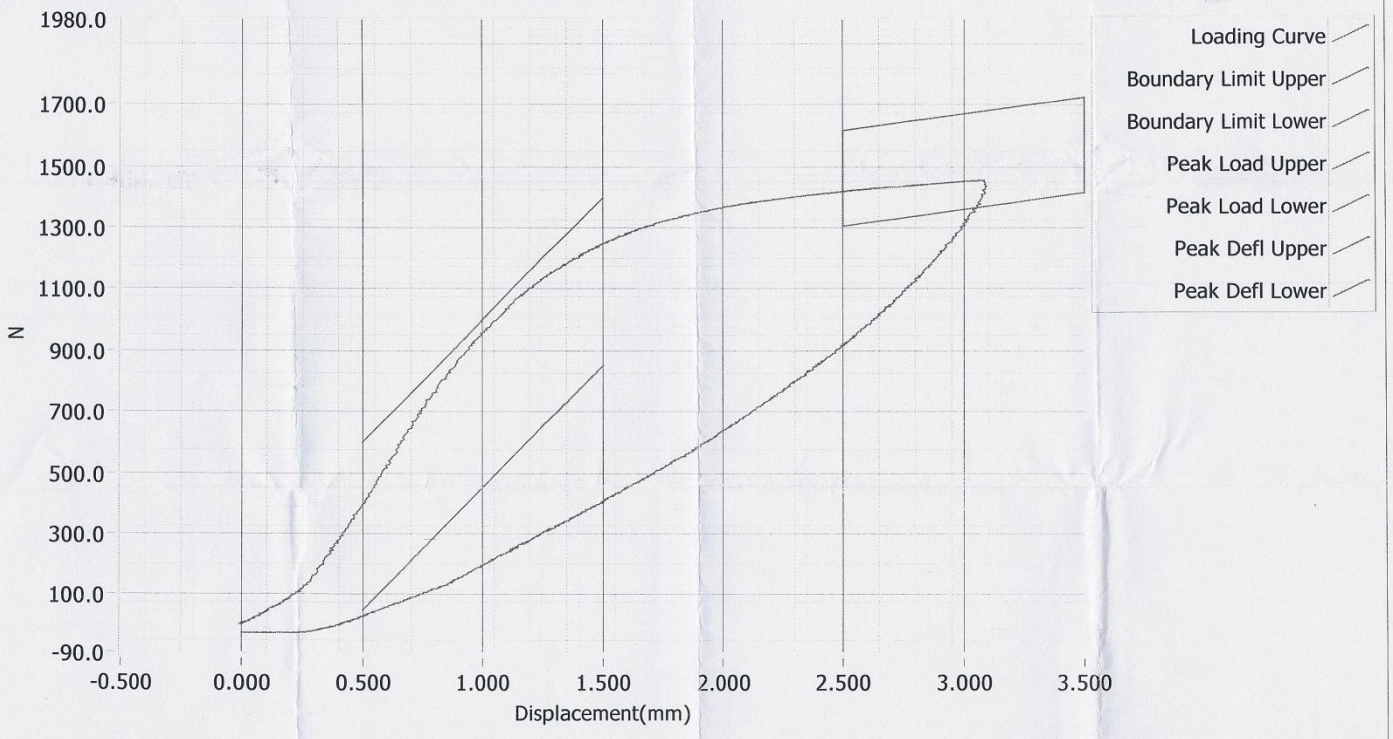


ATD Calibration Lab

Test ID	Part Serial Number	Test Date	Test Time
		10/5/2010	9:21 PM
Cert ID	**ATD Serial Number**	**ATD Type**	
	36791	SIDIIs	

Current Date : 10/5/2010 Current Time : 21:22:17

Resultant Data - SIDIIs Plug Compression



ATD Calibration Lab

Test ID	Part Serial Number	Test Date	Test Time
		9/23/2010	8:23 AM
Cert ID	ATD Serial Number	ATD Type	
	36416	SIDIIs	

Current Date : 9/23/2010 Current Time : 08:23:51

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VERIFICATION REPORT

Test Name:	**Pelvis**	Revision:	**8/24/2009**
Sub Test Name:	**Acetabulum Impact**	Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/6/2011**
Test Number:	**1**	Test Time:	**1:50:50 PM**

Component Part Number	Component Serial Number
180-4343 Pelvis Flesh	**DG3207**

Comments:

Pelvis Plug Used for Certification:
FTSS S/N 36416
Force @ 3mm = 1454N

Pelvis Plug Used for Full Scale Test:
FTSS S/N 36791
Force @ 3mm = 1488N

Test Parameters	Test Specifications			Test Results	
Temperature	20.6	--	22.2	**22.0** deg C	P
Humidity	10	--	70	**37** %RH	P
Velocity	6.60	--	6.80	**6.69** m/s	P
Peak Probe Acceleration	38.0	--	47.0	**45.6** g	P
Peak Pelvis Acceleration	34.0	--	42.0	**40.7** g	P
Peak Acetabulum Force	3.60	--	4.30	**3.85** kN	P

All test parameters are within specifications

Technician: **A. Rudniski**

Supervisor: **D. Travale**

Test ID: Test Time: **1:50:50 PM** Test Date: **10/6/2011**

VERIFICATION REPORT

REFERENCE EQUIPMENT

Manufacturer	Model	Serial Number	Calibration Date
DentonATD	**Velocity Trap**	**1**	**1/11/2011**
Endevco	**7264-2000**	**P18524**	**7/28/2011**
Endevco	**7264-2000**	**P51875**	**9/29/2011**
FTSS	**IF-520**	**LC-102Fy**	**3/25/2011**

Test ID: Test Time: **1:50:50 PM** Test Date: **10/6/2011**

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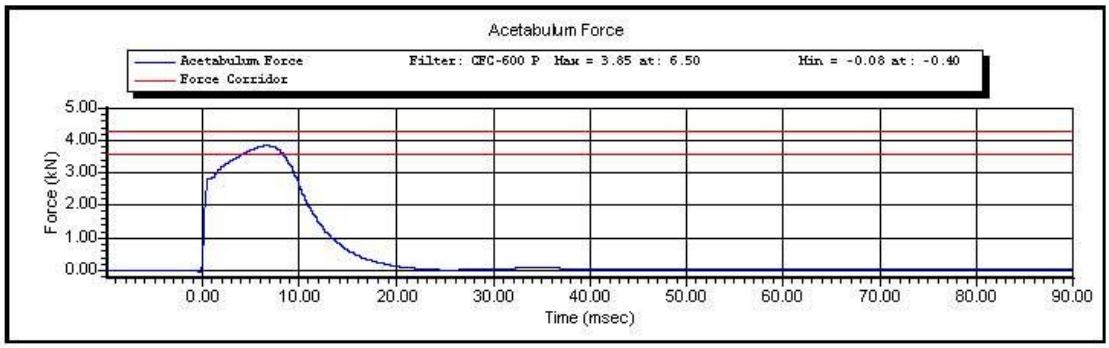
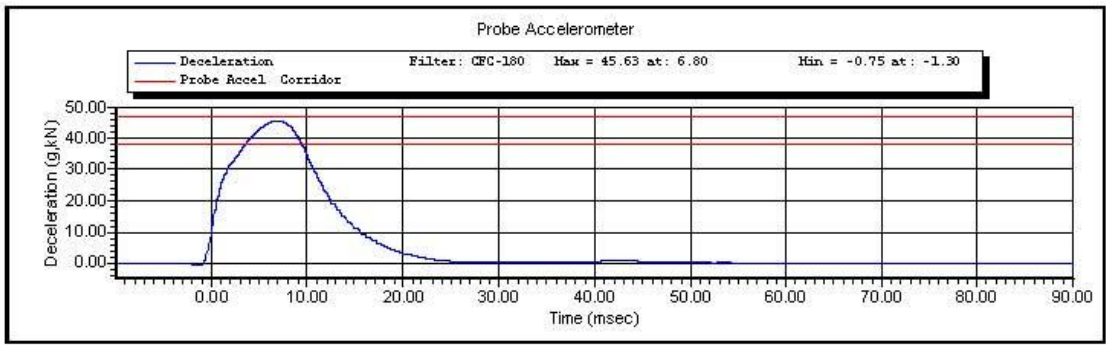
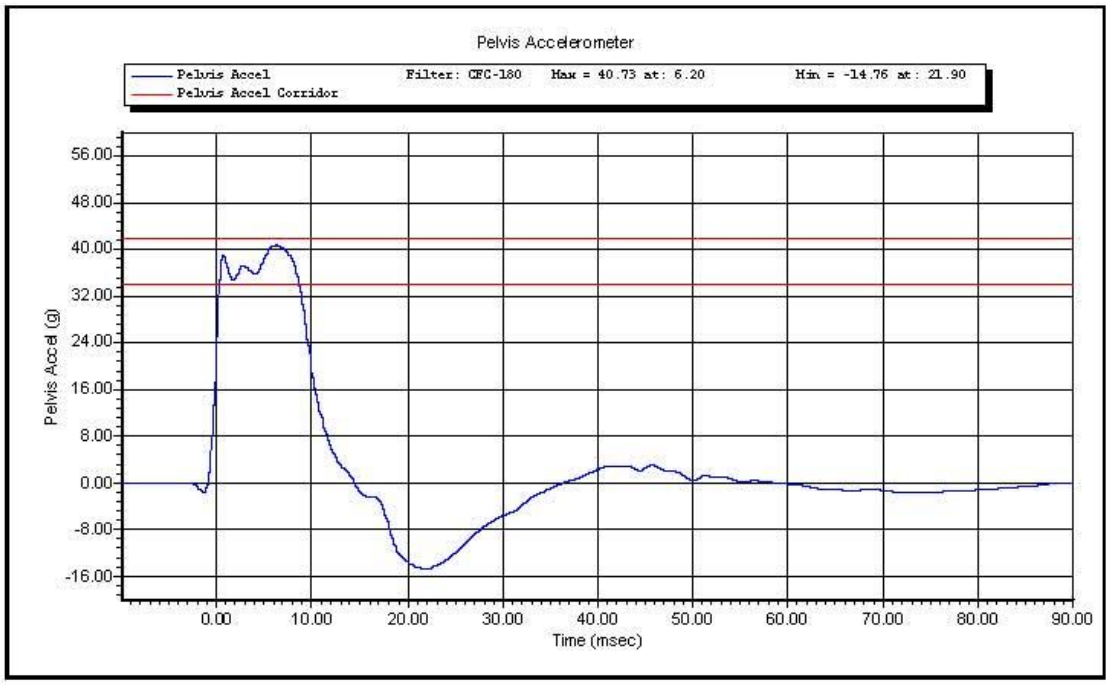
Test Name:	**Pelvis**	Revision:	**8/24/2009**
Sub Test Name:	**Acetabulum Impact**	Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/6/2011**
Test Number:	**1**	Test Time:	**1:50:50 PM**







Test ID: Test Time: **1:50:50 PM** Test Date: **10/6/2011**

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VERIFICATION REPORT

Test Name:	**Pelvis**	Revision:	**8/24/2009**
Sub Test Name:	**Iliac Impact**	Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/6/2011**
Test Number:	**1**	Test Time:	**12:00:55 PM**

Component Part Number	Component Serial Number
180-4343 Pelvis Flesh	**DG3207**

Test Parameters	Test Specifications			Test Results		
Temperature	20.6	--	22.2	**22.0**	deg C	P
Humidity	10	--	70	**38**	%RH	P
Velocity	4.20	--	4.40	**4.33**	m/s	P
Peak Probe Acceleration	36.0	--	45.0	**43.3**	g	P
Peak Pelvis Acceleration	28.0	--	39.0	**33.1**	g	P
Peak Iliac Force	4.10	--	5.10	**4.75**	kN	P

All test parameters are within specifications

Technician: **A. Rudniski**

Supervisor: **D. Travale**

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VERIFICATION REPORT

REFERENCE EQUIPMENT

Manufacturer	Model	Serial Number	Calibration Date
DentonATD	**Velocity Trap**	**1**	**1/11/2011**
Endevco	**7264-2000**	**P18524**	**7/28/2011**
Endevco	**7264-2000**	**P51875**	**9/29/2011**
DentonATD	**3228J**	**LC-281Fy**	**8/31/2011**

Test ID: Test Time: **12:00:55 PM** Test Date: **10/6/2011**

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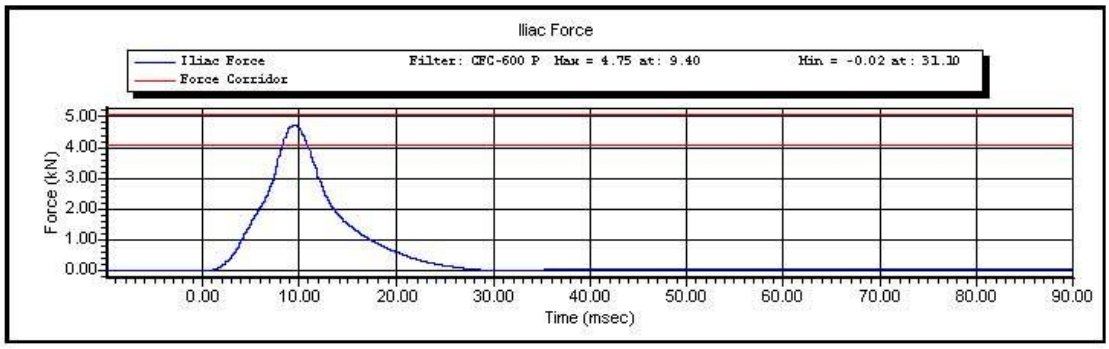
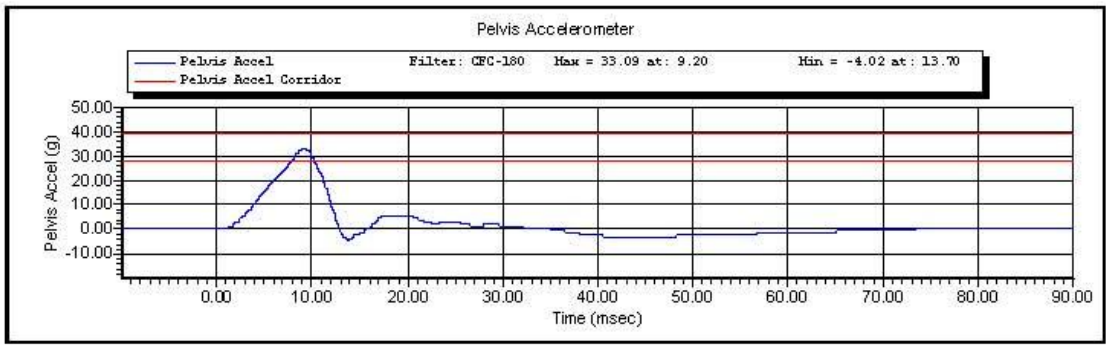
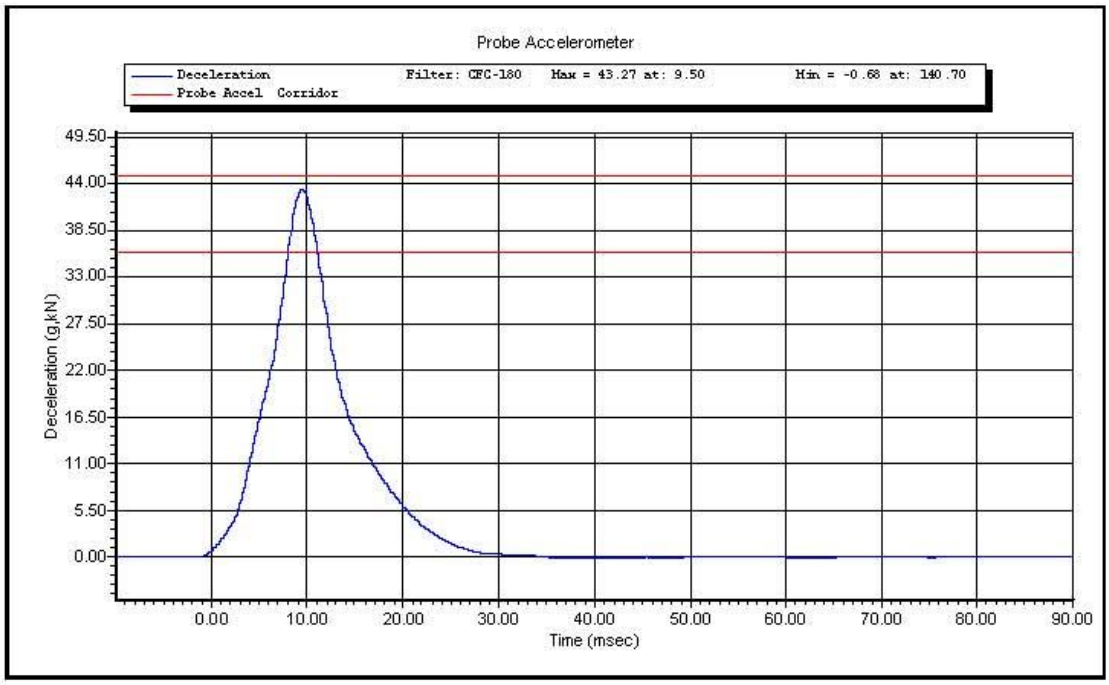
Test Name:	**Pelvis**	Revision:	**8/24/2009**
Sub Test Name:	**Iliac Impact**	Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/6/2011**
Test Number:	**1**	Test Time:	**12:00:55 PM**







Test ID: Test Time: **12:00:55 PM** Test Date: **10/6/2011**

CALIBRATION TEST RESULTS

POST-TEST

SID-IIs No: DG8012

CONFIGURED FOR LEFT SIDE IMPACT

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SID-IIsD External Measurements

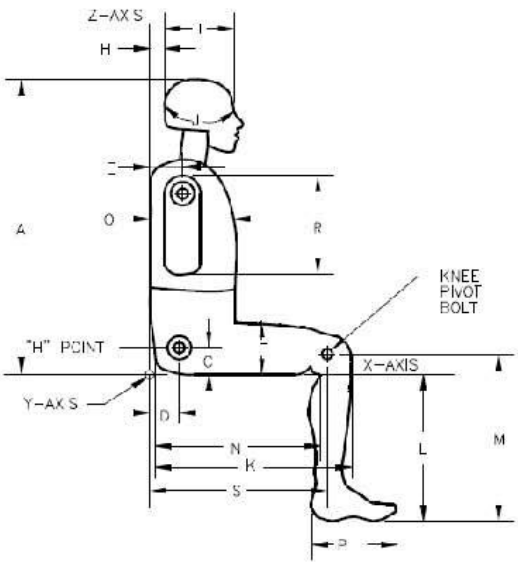
NHTSA ATD S/N DG8012

Symbol	Description	Specification	Results	Pass
		mm	mm	
A	Sitting Height	772.0 - 788.0	784	Yes
B	Shoulder Pivot Height	437.0 - 453.0	444	Yes
C	H-Point Height	79.0 - 89.0	85	Yes
D	H-Point from Seat Back	141.0 - 151.0	148	Yes
E	Shoulder Pivot from Backline	97.0 - 107.0	100	Yes
F	Thigh Clearance	119.0 - 135.0	132	Yes
G	Head Breadth	140.0 - 148.0	145	Yes
H	Head Back from Backline	40.0 - 46.0	43	Yes
I	Head Depth	178.0 - 188.0	187	Yes
J	Head Circumference	541.0 - 551.0	548	Yes
K	Buttock to Knee Length	514.0 - 540.0	530	Yes
L	Popliteal Height	343.0 - 369.0	359	Yes
M	Knee Pivot to Floor Height	393.0 - 409.0	402	Yes
N	Buttock Popliteal Length	416.0 - 442.0	434	Yes
O	Chest Depth without Jacket	195.0 - 211.0	204	Yes
P	Foot Length (right)	216.0 - 232.0	223	Yes
Q	Hip Breadth	313.0 - 323.0	315	Yes
R	Arm Length	249.0 - 259.0	257	Yes
S	Knee Joint to Seat back	478.0 - 493.0	490	Yes
V	Shoulder Width (only one arm installed)	341.0 - 357.0	354	Yes
W	Foot Width (right)	78.0 - 94.0	84	Yes
Y	Chest Circumference with Jacket	851.0 - 881.0	870	Yes
Z	Waist Circumference	761.0 - 791.0	782	Yes

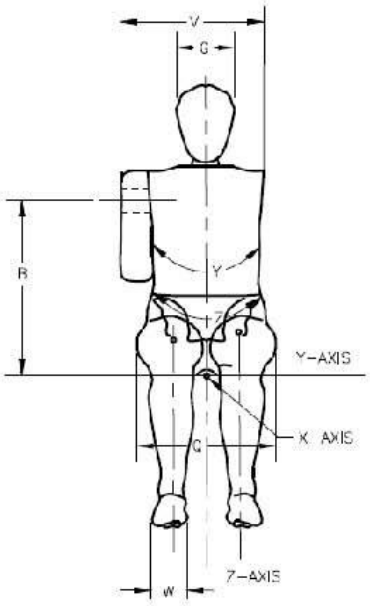
Technician : AR

Date: 10/17/2011

SID-IIsD External Dimension Reference Diagram



SIDE VIEW



FRONT VIEW

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VERIFICATION REPORT

Test Name:	**Head Drop**	Revision:	**12/14/2006**
Sub Test Name:		Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
		Test Date:	**10/17/2011**
Test Number:	**1**	Test Time:	**11:38:13 AM**

Component Part Number	Component Serial Number
Head Skin - 180-1002	**1362**

Test Parameters	Test Specifications			Test Results		
Temperature	20.6	--	22.2	**21.4**	deg C	P
Humidity	10	--	70	**38**	%RH	P
Resultant Acceleration	115.0	--	137.0	**122.0**	g	P
Oscillation	0.0	--	15.0	**1.3**	%	P
Fore-Aft Acceleration	-15.0	--	15.0	**3.0**	g	P

All test parameters are within specifications

Technician: **A. Rudniski**

Supervisor: **D. Travale**

Test ID: Test Time: **11:38:13 AM** Test Date: **10/17/2011**

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VERIFICATION REPORT

REFERENCE EQUIPMENT

Manufacturer	Model	Serial Number	Calibration Date
Endevco	**7264-2000**	**P51885**	**10/17/2011**
Endevco	**7264-2000**	**P58839**	**10/17/2011**
Endevco	**7264-2000**	**P51991**	**10/17/2011**

Test ID: Test Time: **11:38:13 AM** Test Date: **10/17/2011**

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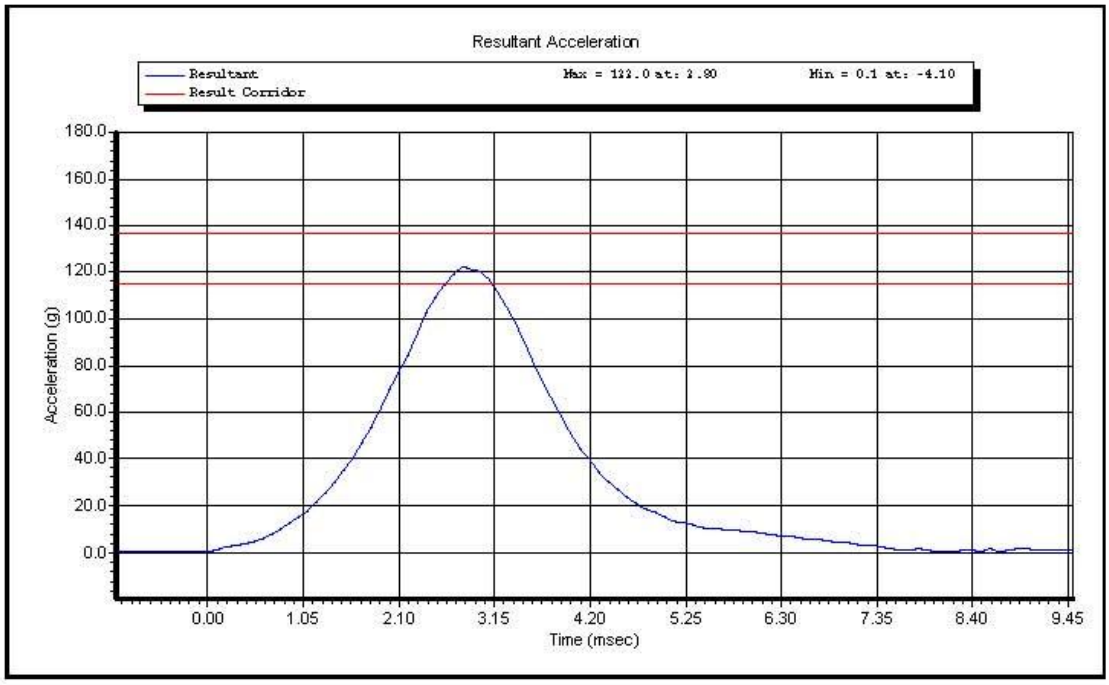
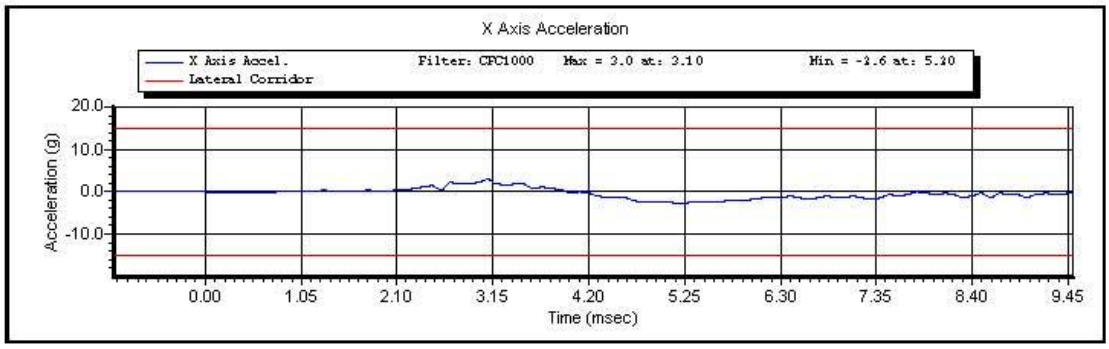
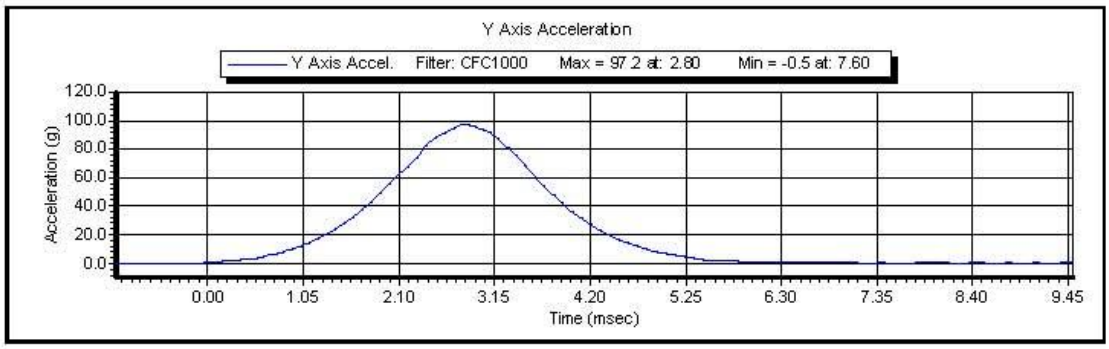
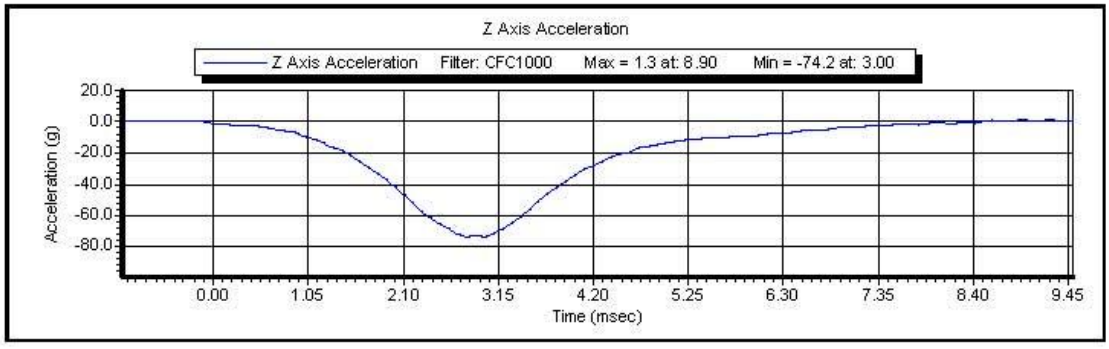
Test Name:	**Head Drop**	Revision:	**12/14/2006**
Sub Test Name:		Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/17/2011**
Test Number:	**1**	Test Time:	**11:38:13 AM**









Test ID: Test Time: **11:38:13 AM** Test Date: **10/17/2011**

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VERIFICATION REPORT

Test Name:	**Neck Pendulum**	Revision:	**8/24/2009**
Sub Test Name:	**Left Side**	Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/15/2011**
Test Number:	**1**	Test Time:	**7:06:05 PM**

Component Part Number	Component Serial Number
Neck - 180-2000	**DG7061**

Test Parameters	Test Specifications	Test Results	
Temperature	20.6 -- 22.2	**21.0** deg C	P
Humidity	10 -- 70	**48** %RH	P
Velocity	5.51 -- 5.63	**5.55** m/s	P
Pendulum Impulse at 10 ms	2.20 -- 2.80	**2.53** m/s	P
Pendulum Impulse at 15 ms	3.30 -- 4.10	**3.66** m/s	P
Pendulum Impulse at 20 ms	4.40 -- 5.40	**4.96** m/s	P
Pendulum Impulse at 25 ms	5.40 -- 6.10	**5.77** m/s	P
Pendulum Impulse between 25 and 100 ms	5.50 -- 6.20	**5.81** m/s	P
Max D Plane Rotation	71.0 -- 81.0	**76.5** degrees	P
Time at Max Rotation	50.0 -- 70.0	**61.7** ms	P
Moment about OC	-44.0 -- -36.0	**-40.5** Nm	P
Moment Decay to Zero	102.0 -- 126.0	**115.9** ms	P

All test parameters are within specifications

Technician: **A. Rudniski**

Supervisor: **D. Travale**

Test ID: Test Time: **7:06:05 PM** Test Date: **10/15/2011**

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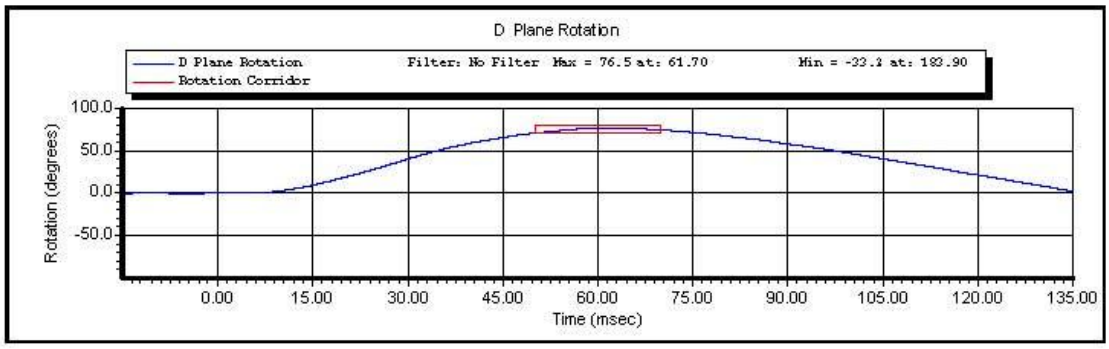
VERIFICATION REPORT

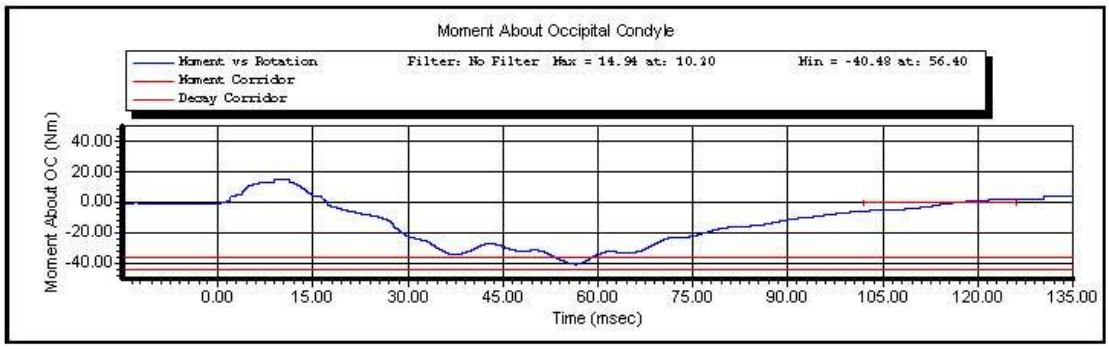
REFERENCE EQUIPMENT

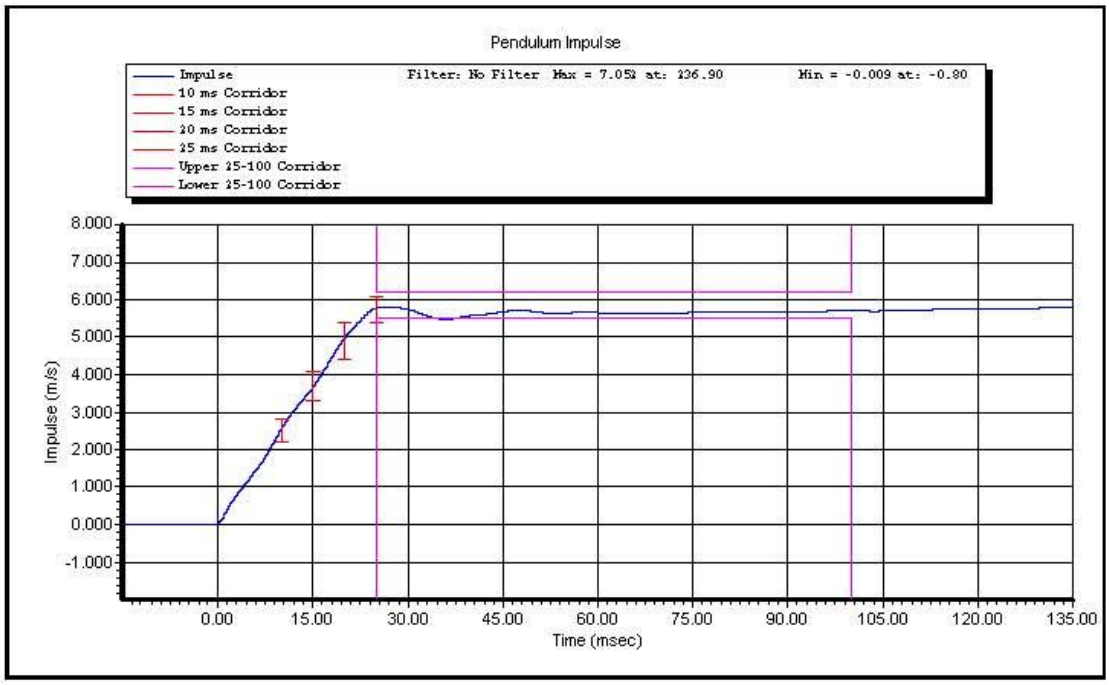
Manufacturer	Model	Serial Number	Calibration Date
DentonATD	Velocity Trap	1	1/11/2011
Endevco	7231CT	C16510	10/3/2011
Denton	1716A	LC-2192Fy	8/31/2011
Denton	1716A	LC-2192Mx	8/31/2011
DentonATD	78051-342	184	5/8/2011
DentonATD	78051-342	174	5/8/2011
DentonATD	78051-342	185	5/8/2011

Test ID: Test Time: **7:06:05 PM** Test Date: **10/15/2011**

Test Name:	**Neck Pendulum**	Revision:	**8/24/2009**
Sub Test Name:	**Left Side**	Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/15/2011**
Test Number:	**1**	Test Time:	**7:06:05 PM**







Test ID: Test Time: **7:06:05 PM** Test Date: **10/15/2011**

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VERIFICATION REPORT

Test Name:	**Shoulder Impact**	Revision:	**8/24/2009**
Sub Test Name:		Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
		Test Date:	**10/16/2011**
Test Number:	**1**	Test Time:	**11:07:15 AM**

Component Part Number	Component Serial Number
Left Arm 180-6011-1	**DG3210**
Shoulder Rib 180-3355	**DG6997**
Shoulder Plug 180-6019	

Test Parameters	Test Specifications			Test Results		
Temperature	20.6	--	22.2	**21.10**	deg C	P
Humidity	10.0	--	70.0	**41.0**	%RH	P
Velocity	4.20	--	4.40	**4.33**	m/s	P
Probe Acceleration	13.0	--	18.0	**14.9**	g	P
Shoulder Deflection	28.0	--	37.0	**29.7**	mm	P
T1 Acceleration	17.0	--	22.0	**20.0**	g	P

All test parameters are within specifications

Technician: **A. Rudniski**

Supervisor: **D. Travale**

Test ID: Test Time: **11:07:15 AM** Test Date: **10/16/2011**

VERIFICATION REPORT

REFERENCE EQUIPMENT

Manufacturer	Model	Serial Number	Calibration Date
DentonATD	**Velocity Trap**	**1**	**1/11/2011**
Endevco	**7264-2000**	**P18524**	**7/28/2011**
FTSS	**180-3881-1**	**DS-1845**	**9/1/2011**
Endevco	**7264-2000**	**P63561**	**10/3/2011**

Test ID: Test Time: **11:07:15 AM** Test Date: **10/16/2011**

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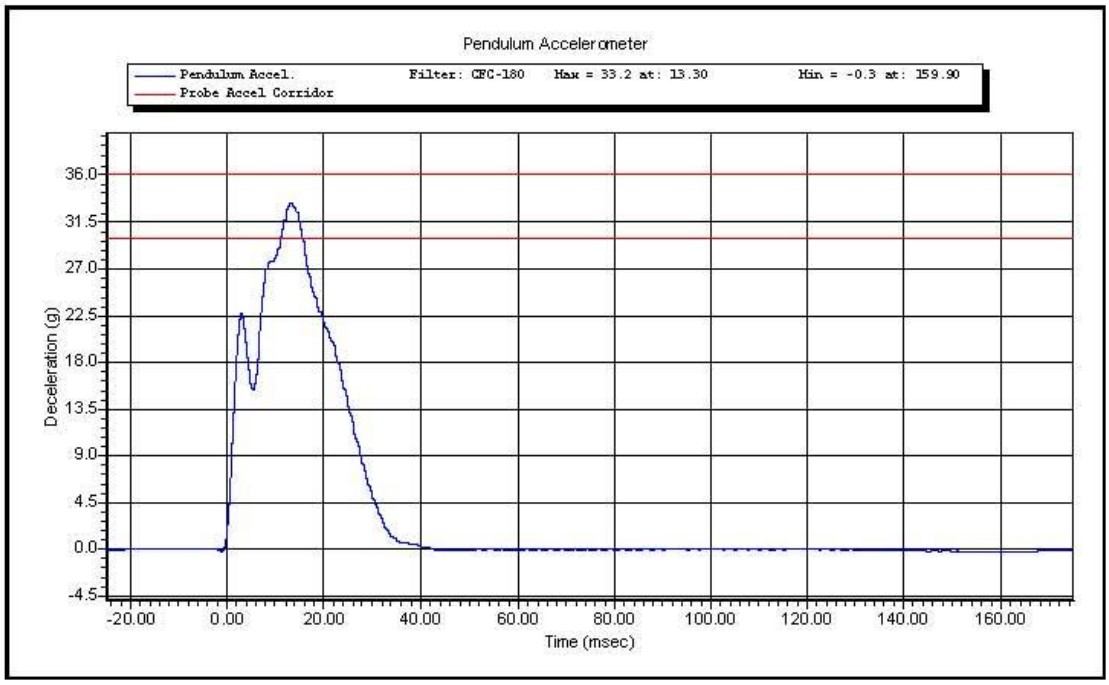
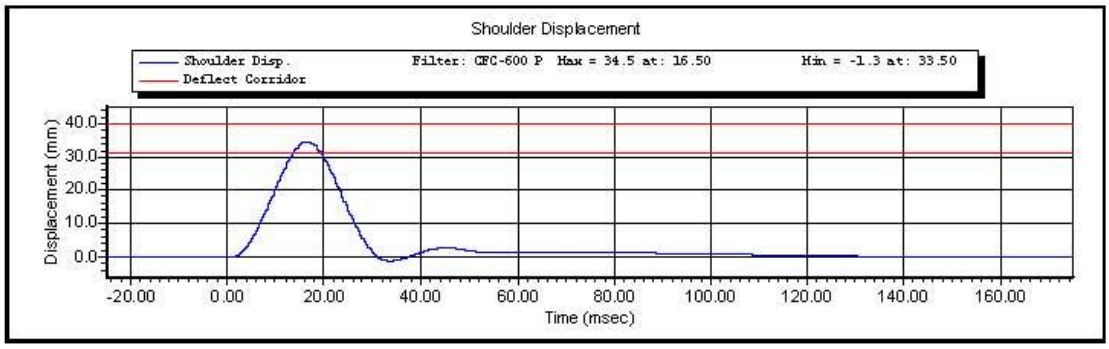
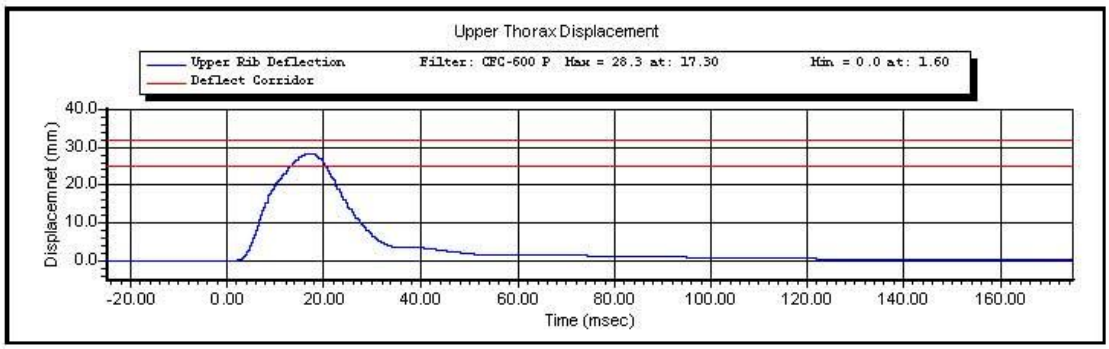
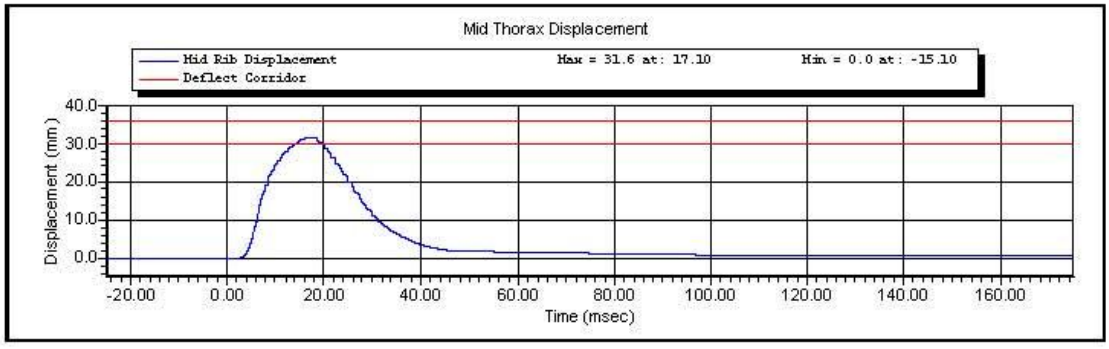
Test Name:	**Thorax Impact with Arm**	Revision:	**8/24/2009**
Sub Test Name:		Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/16/2011**
Test Number:	**1**	Test Time:	**12:46:30 PM**









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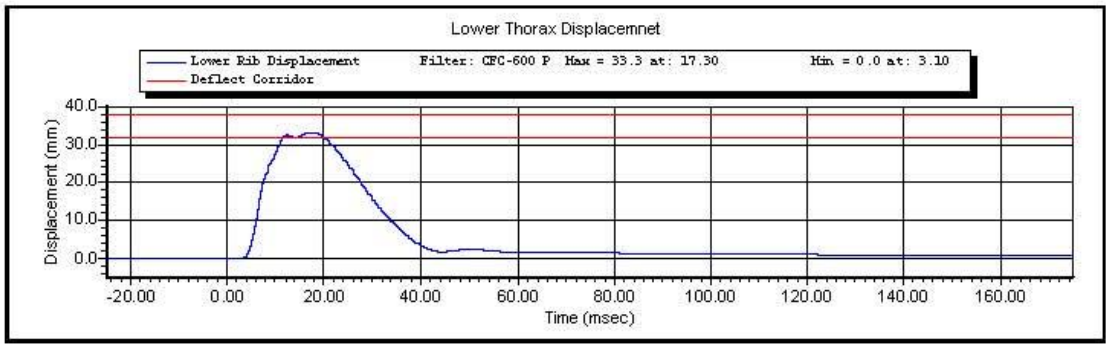

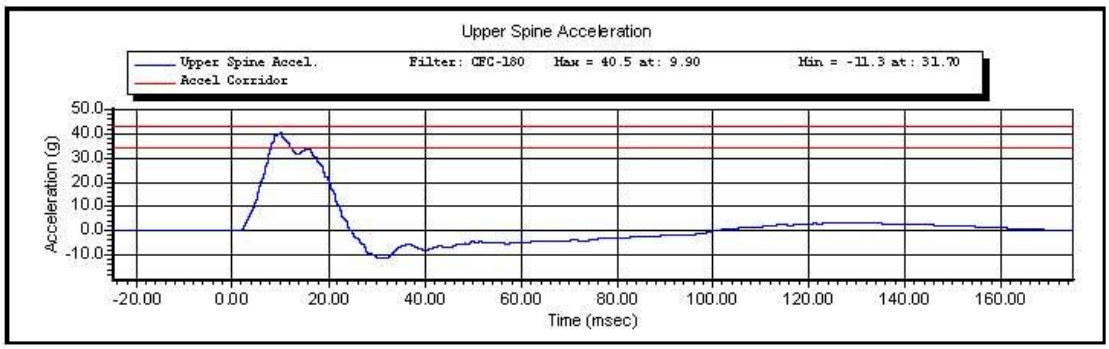

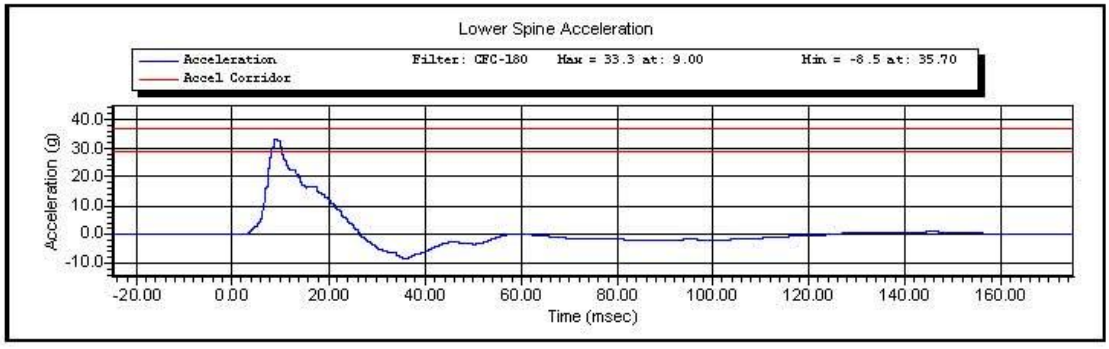

Test ID: Test Time: **12:46:30 PM** Test Date: **10/16/2011**

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VERIFICATION REPORT

Test Name:	**Thorax Impact without Arm**	Revision:	**8/24/2009**
Sub Test Name:		Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/16/2011**
Test Number:	**1**	Test Time:	**12:10:46 PM**

Component Part Number	Component Serial Number
Thorax Ribs 1, 2, 3	**DG6080, DG6081, DG7543**

Test Parameters	Test Specifications			Test Results		
Temperature	20.6	--	22.2	**21.1**	deg C	P
Humidity	10	--	70	**44**	%RH	P
Velocity	4.20	--	4.40	**4.31**	m/s	P
Probe Acceleration	14.0	--	18.0	**16.6**	g	P
Upper Thorax Rib Deflection	32.0	--	40.0	**36.7**	mm	P
Mid Thorax Rib Deflection	39.0	--	45.0	**41.8**	mm	P
Lower Thorax Rib Deflection	35.0	--	43.0	**39.2**	mm	P
Upper Spine Acceleration T1	13.0	--	17.0	**16.1**	g	P
Lower Spine Acceleration T12	7.0	--	11.0	**10.1**	g	P

All test parameters are within specifications

Technician: **A. Rudniski**

Supervisor: **D. Travale**

Test ID: Test Time: **12:10:46 PM** Test Date: **10/16/2011**

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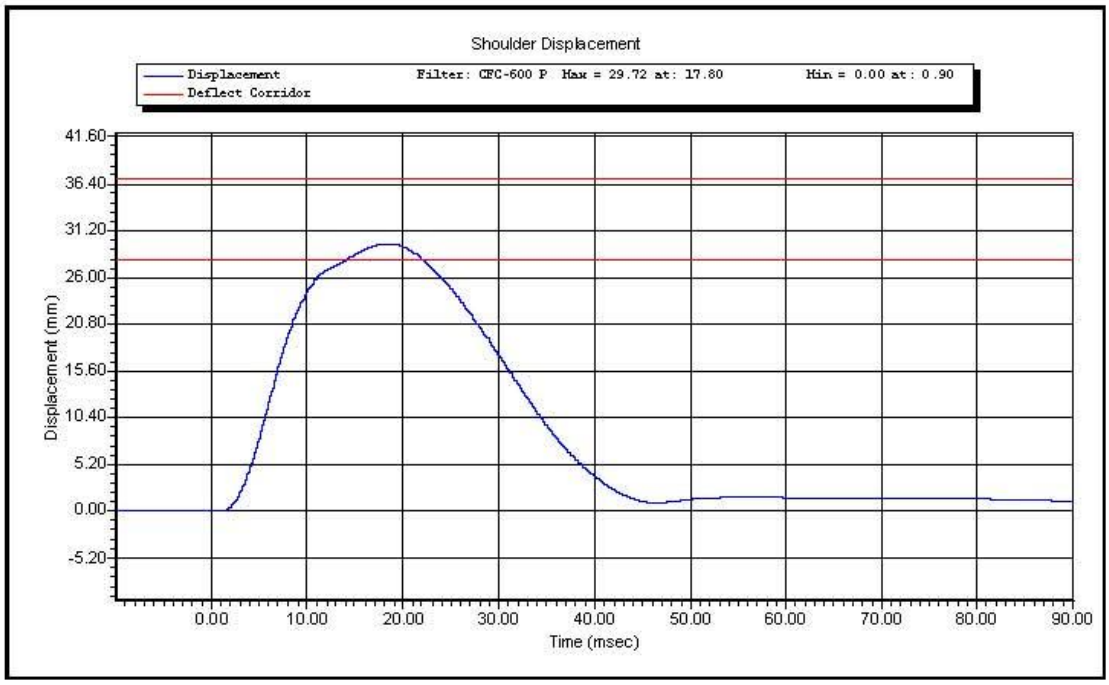
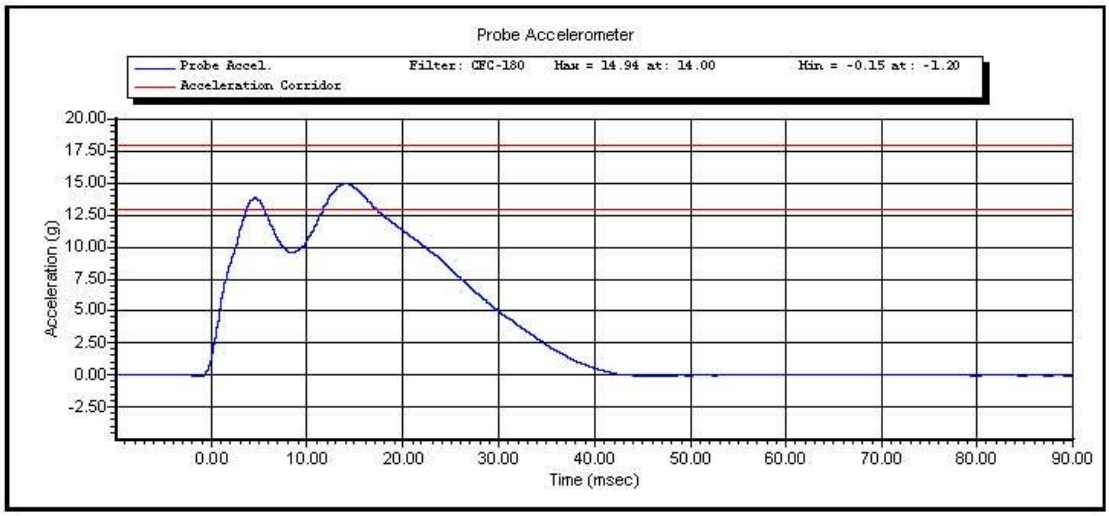
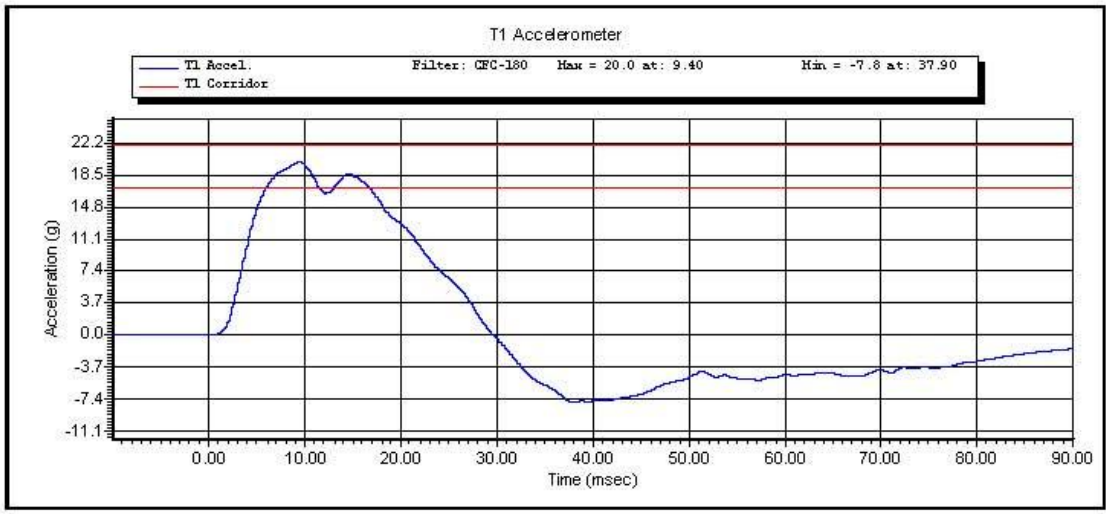
Test Name:	**Shoulder Impact**	Revision:	**8/24/2009**
Sub Test Name:		Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/16/2011**
Test Number:	**1**	Test Time:	**11:07:15 AM**







Test ID: Test Time: **11:07:15 AM** Test Date: **10/16/2011**

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VERIFICATION REPORT

Test Name:	**Thorax Impact with Arm**	Revision:	**8/24/2009**
Sub Test Name:		Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/16/2011**
Test Number:	**1**	Test Time:	**12:46:30 PM**

Component Part Number	Component Serial Number
Thorax Ribs 1, 2, 3 180-3362	**DG6080, DG6081, DG7543**
Shoulder Rib 180-3355	**DG6997**
Left Arm 180-6011-1	**DG3210**

Test Parameters	Test Specifications			Test Results		
Temperature	20.6	--	22.2	**21.1**	deg C	P
Humidity	10	--	70	**44**	%RH	P
Velocity	6.60	--	6.80	**6.67**	m/s	P
Probe Acceleration after 5ms	30.0	--	36.0	**33.2**	g	P
Upper Thorax Rib Deflection	25.0	--	32.0	**28.3**	mm	P
Mid Thorax Rib Deflection	30.0	--	36.0	**31.6**	mm	P
Lower Thorax Rib Deflection	32.0	--	38.0	**33.3**	mm	P
Upper Spine Acceleration ("y")	34.0	--	43.0	**40.5**	g	P
Lower Spine Acceleration ("y")	29.0	--	37.0	**33.3**	g	P
Shoulder Deflection	31.0	--	40.0	**34.5**	mm	P

All test parameters are within specifications

Technician: **A. Rudniski**

Supervisor: **D. Travale**

Test ID: Test Time: **12:46:30 PM** Test Date: **10/16/2011**

VERIFICATION REPORT

REFERENCE EQUIPMENT

Manufacturer	Model	Serial Number	Calibration Date
DentonATD	**Velocity Trap**	**1**	**1/11/2011**
Endevco	**7264-2000**	**P18524**	**7/28/2011**
FTSS	**180-3881-1**	**DS-1849**	**9/1/2011**
FTSS	**180-3881-1**	**DS-1857**	**9/1/2011**
FTSS	**180-3881-1**	**DS-1859**	**9/1/2011**
Endevco	**7264-2000**	**P63561**	**10/3/2011**
Endevco	**7264-2000**	**P58796**	**10/5/2011**
FTSS	**180-3881-1**	**DS-1845**	**9/1/2011**

Test ID: Test Time: **12:46:30 PM** Test Date: **10/16/2011**

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VERIFICATION REPORT

REFERENCE EQUIPMENT

Manufacturer	Model	Serial Number	Calibration Date
DentonATD	**Velocity Trap**	**1**	**1/11/2011**
Endevco	**7264-2000**	**P18524**	**7/28/2011**
FTSS	**180-3881-1**	**DS-1849**	**9/1/2011**
FTSS	**180-3881-1**	**DS-1857**	**9/1/2011**
FTSS	**180-3881-1**	**DS-1859**	**9/1/2011**
Endevco	**7264-2000**	**P63561**	**10/3/2011**
Endevco	**7264-2000**	**P58796**	**10/5/2011**

Test ID: Test Time: **12:10:46 PM** Test Date: **10/16/2011**

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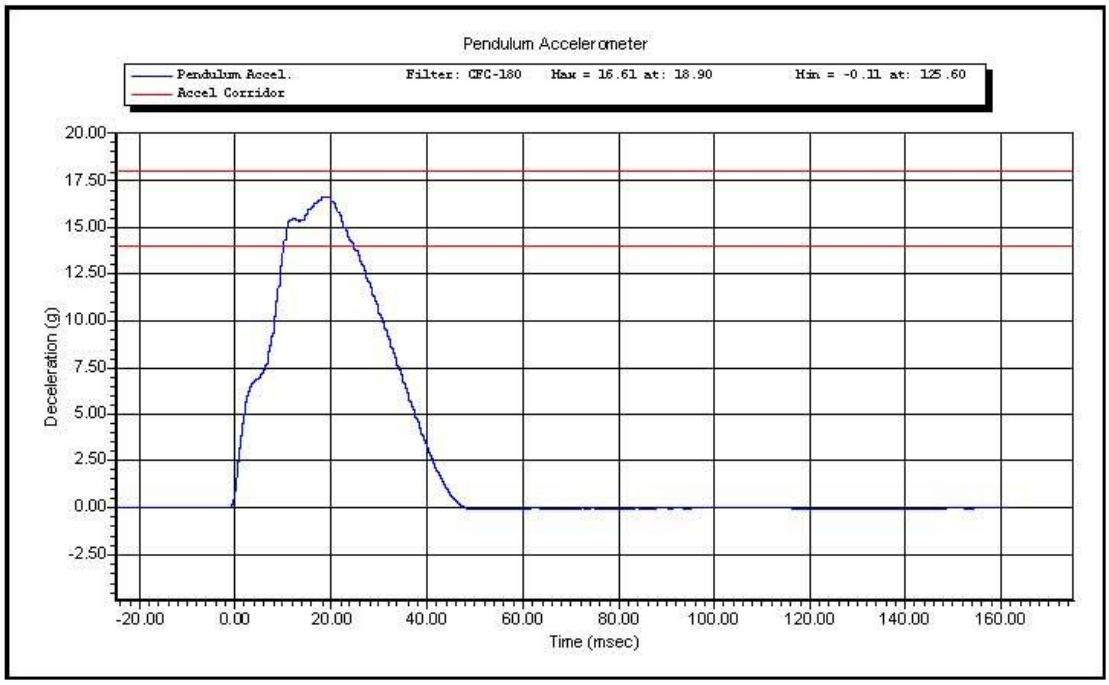
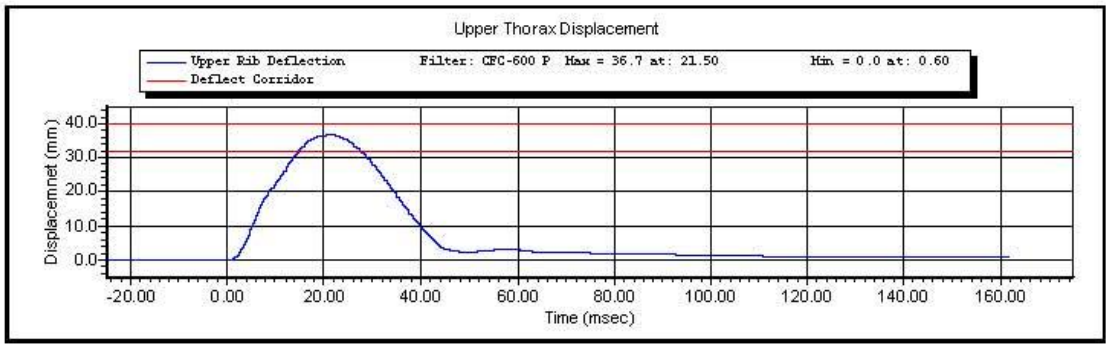
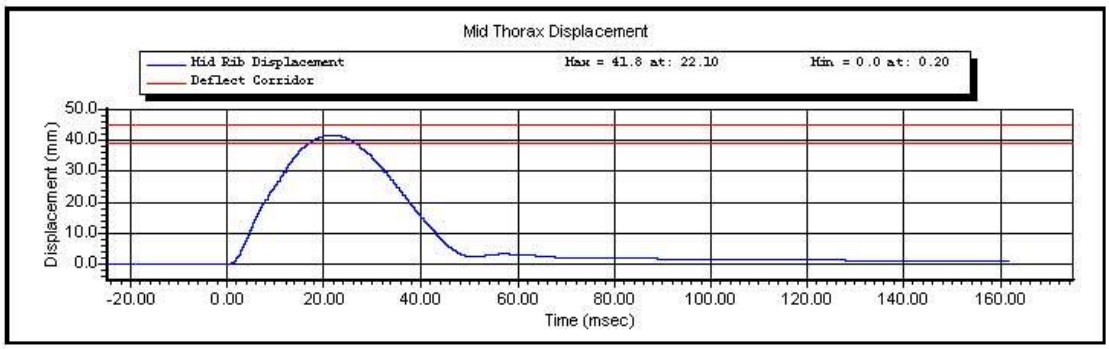
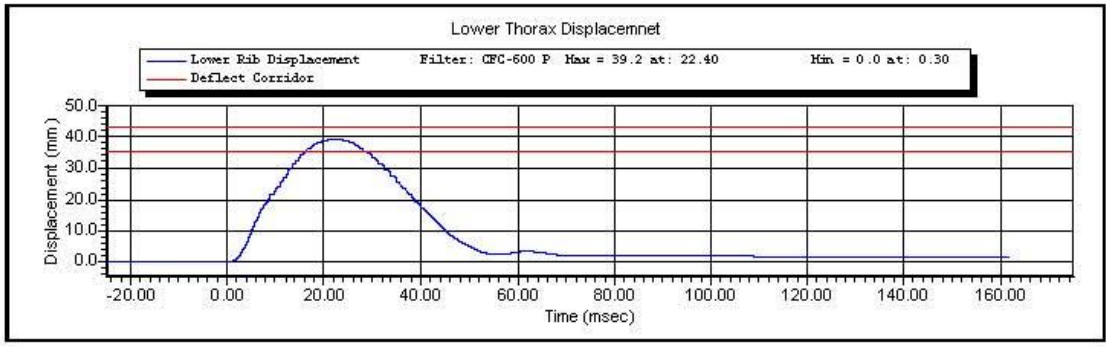
Test Name:	**Thorax Impact without Arm**	Revision:	**8/24/2009**
Sub Test Name:		Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/16/2011**
Test Number:	**1**	Test Time:	**12:10:46 PM**

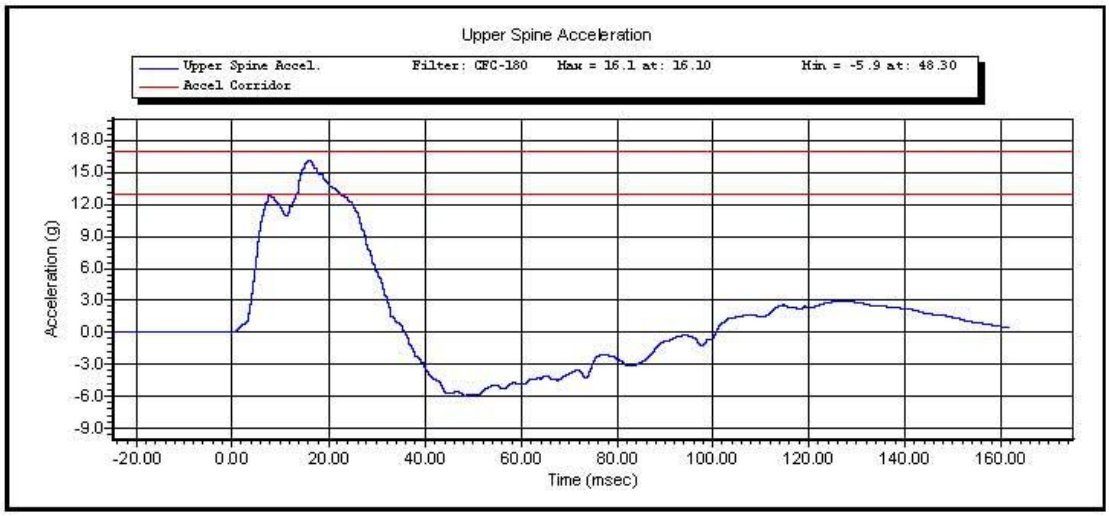


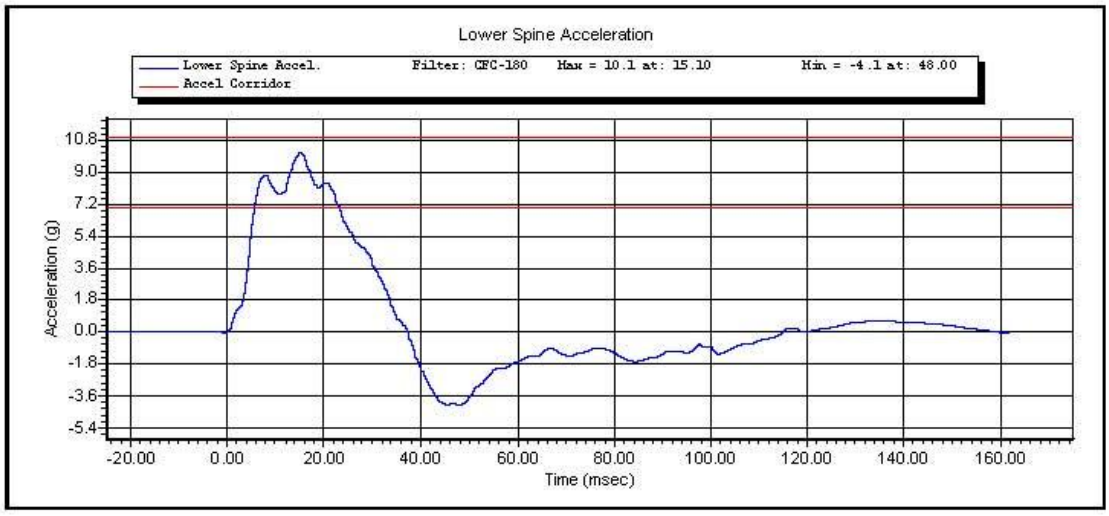






Test ID: Test Time: **12:10:46 PM** Test Date: **10/16/2011**





Test ID: Test Time: **12:10:46 PM** Test Date: **10/16/2011**

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VERIFICATION REPORT

Test Name:	**Abdominal Impact**	Revision:	**8/24/2009**
Sub Test Name:		Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/16/2011**
Test Number:	**1**	Test Time:	**11:37:51 AM**

Component Part Number	Component Serial Number
Thorax Ribs 4, 5	**DG7011, DG7012**

Test Parameters	Test Specifications			Test Results		
Temperature	20.6	--	22.2	**21.1**	deg C	P
Humidity	10	--	70	**42**	%RH	P
Velocity	4.20	--	4.40	**4.32**	m/s	P
Probe Acceleration	12.0	--	16.0	**14.9**	g	P
Upper Abdominal Rib Deflection	36.0	--	47.0	**40.7**	mm	P
Lower Abdominal Rib Deflection	33.0	--	44.0	**38.0**	mm	P
Lower Spine Acceleration - T12	9.0	--	14.0	**11.6**	g	P

All test parameters are within specifications

Technician: **A. Rudniski**

Supervisor: **D. Travale**

Test ID: Test Time: **11:37:51 AM** Test Date: **10/16/2011**

VERIFICATION REPORT

REFERENCE EQUIPMENT

Manufacturer	Model	Serial Number	Calibration Date
DentonATD	**Velocity Trap**	**1**	**1/11/2011**
Endevco	**7264-2000**	**P18524**	**7/28/2011**
FTSS	**180-3881-1**	**DS-1860**	**9/1/2011**
FTSS	**180-3881-1**	**DS-1861**	**9/1/2011**
Endevco	**7264-2000**	**P58796**	**10/5/2011**

Test ID: Test Time: **11:37:51 AM** Test Date: **10/16/2011**

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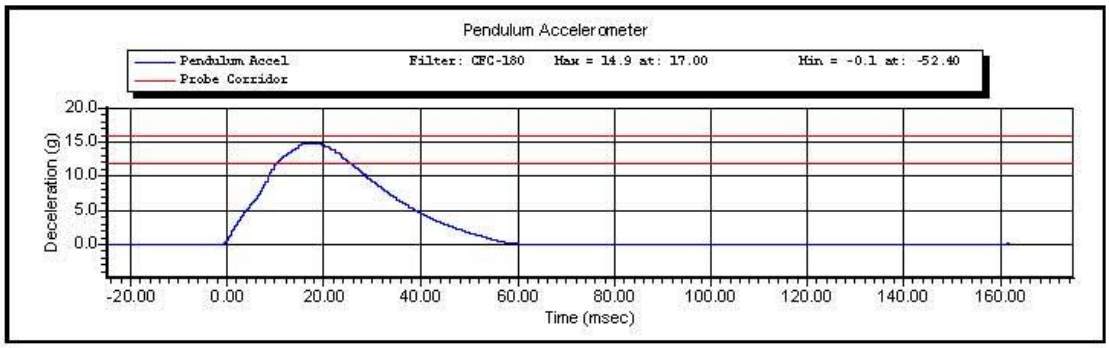
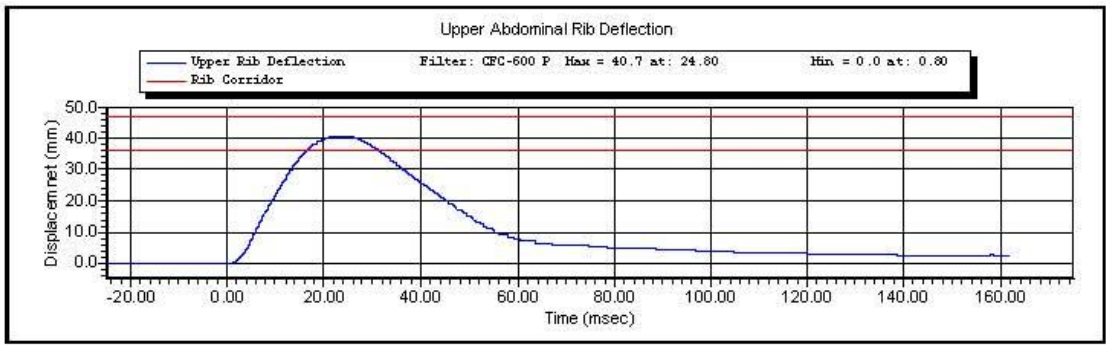
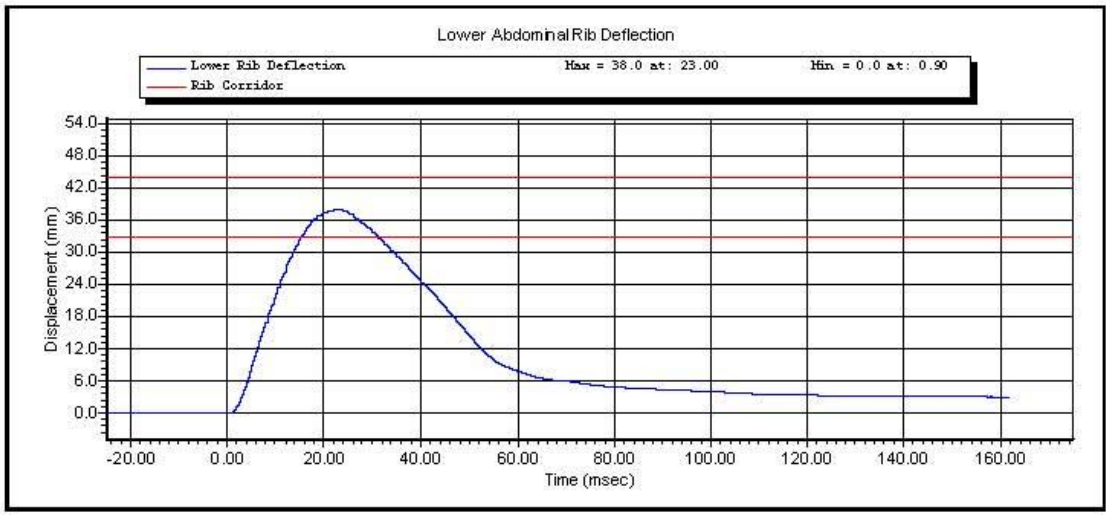
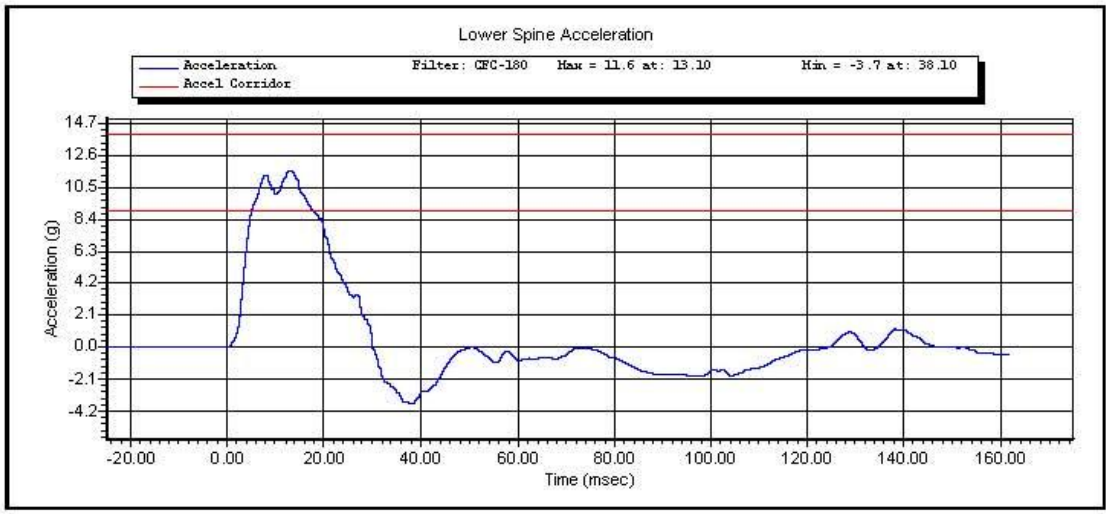
Test Name:	**Abdominal Impact**	Revision:	**8/24/2009**
Sub Test Name:		Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/16/2011**
Test Number:	**1**	Test Time:	**11:37:51 AM**



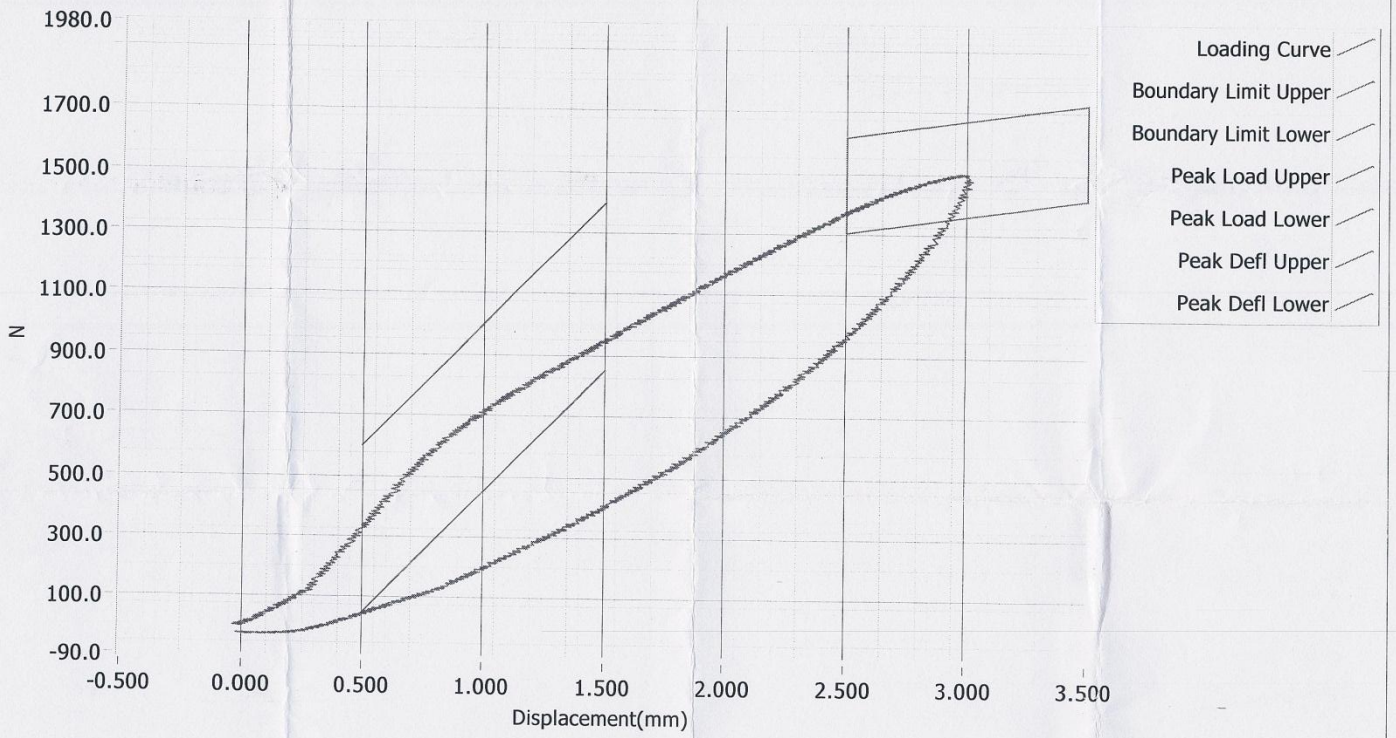






Test ID: Test Time: **11:37:51 AM** Test Date: **10/16/2011**

Resultant Data - SIDIIs Plug Compression

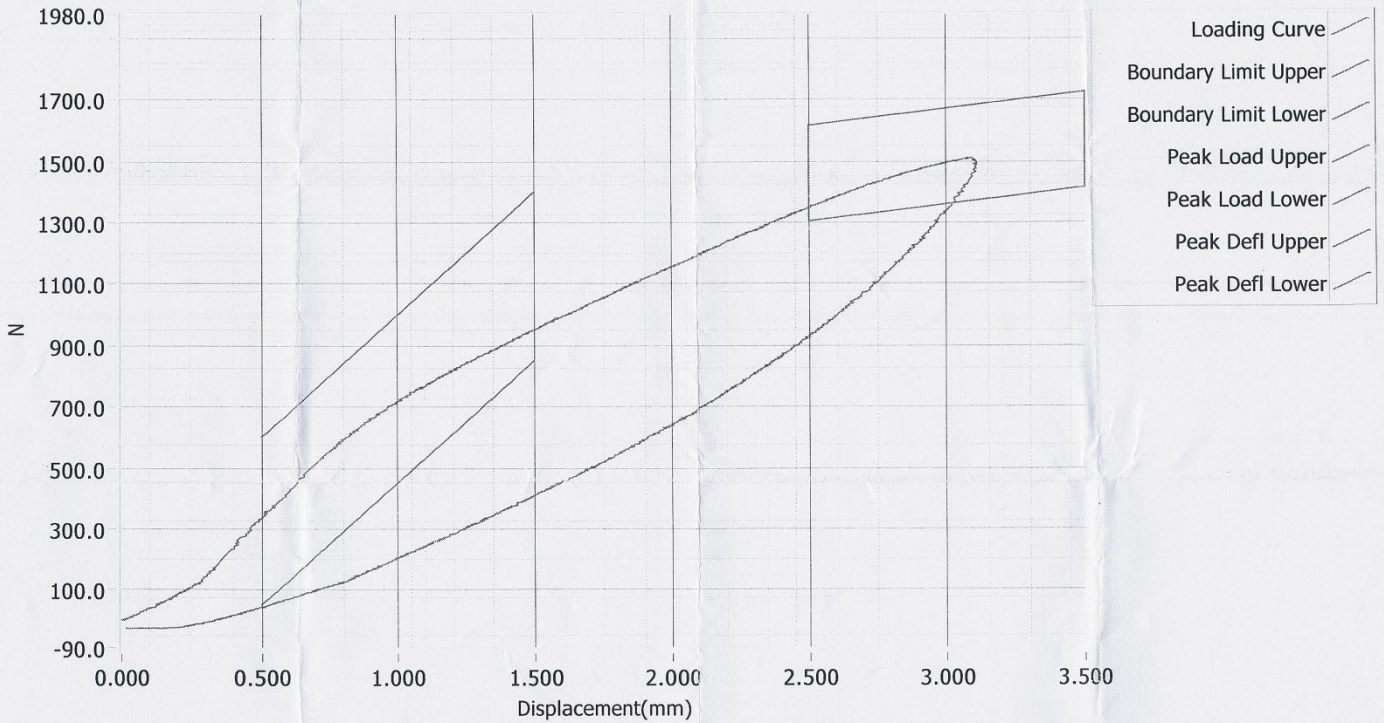


ATD Calibration Lab

Test ID	Part Serial Number	Test Date	Test Time
		9/27/2010	7:05 PM
Cert ID	**ATD Serial Number**	**ATD Type**	
	36660	SIDIIs	

Current Date : 9/27/2010 Current Time : 19:06:49

Resultant Data - SIDIIs Plug Compression



ATD Calibration Lab

Test ID	Part Serial Number	Test Date	Test Time
		9/23/2010	8:15 AM
Cert ID	**ATD Serial Number**	**ATD Type**	
	36414	SIDIIs	

Current Date : 9/23/2010 Current Time : 08:17:12

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VERIFICATION REPORT

Test Name:	**Pelvis**	Revision:	**8/24/2009**
Sub Test Name:	**Acetabulum Impact**	Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
		Test Date:	**10/17/2011**
Test Number:	**2**	Test Time:	**9:11:19 AM**

Component Part Number	Component Serial Number
180-4343 Pelvis Flesh	**DG3207**
FTSS Certification Plug - 1500N	**36660**
FTSS Full Scale Test Plug - 1496N	**36414**

Test Parameters	Test Specifications			Test Results		
Temperature	20.6	--	22.2	**21.5**	deg C	P
Humidity	10	--	70	**38**	%RH	P
Velocity	6.60	--	6.80	**6.61**	m/s	P
Peak Probe Acceleration	38.0	--	47.0	**44.6**	g	P
Peak Pelvis Acceleration	34.0	--	42.0	**41.4**	g	P
Peak Acetabulum Force	3.60	--	4.30	**3.78**	kN	P

All test parameters are within specifications

Technician: **A. Rudniski**

Supervisor: **D. Travale**

Test ID: Test Time: **9:11:19 AM** Test Date: **10/17/2011**

VERIFICATION REPORT

REFERENCE EQUIPMENT

Manufacturer	Model	Serial Number	Calibration Date
DentonATD	**Velocity Trap**	**1**	**1/11/2011**
Endevco	**7264-2000**	**P18524**	**7/28/2011**
Endevco	**7264-2000**	**P51875**	**9/29/2011**
FTSS	**IF-520**	**LC-102Fy**	**3/25/2011**

Test ID: Test Time: **9:11:19 AM** Test Date: **10/17/2011**

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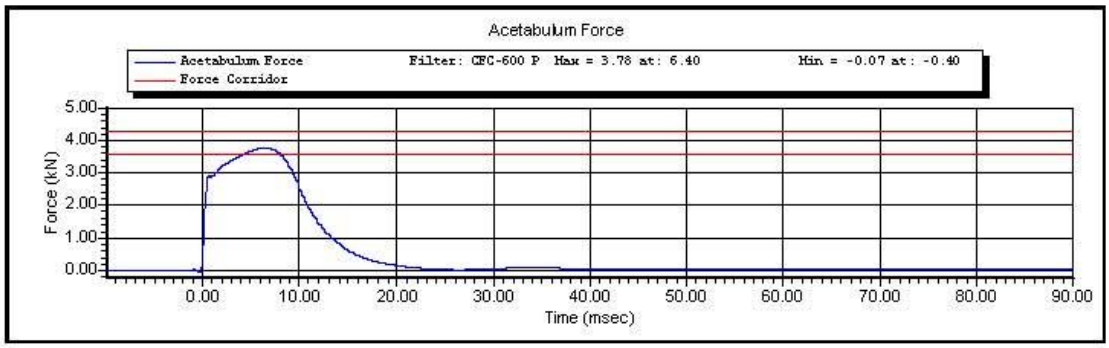
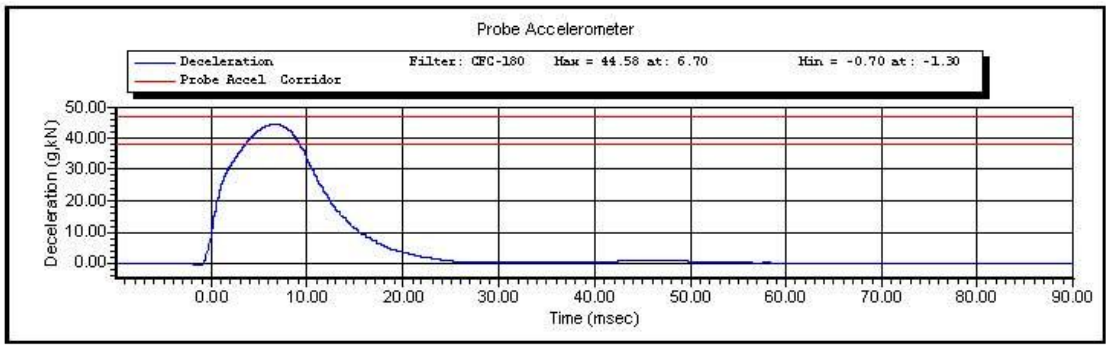
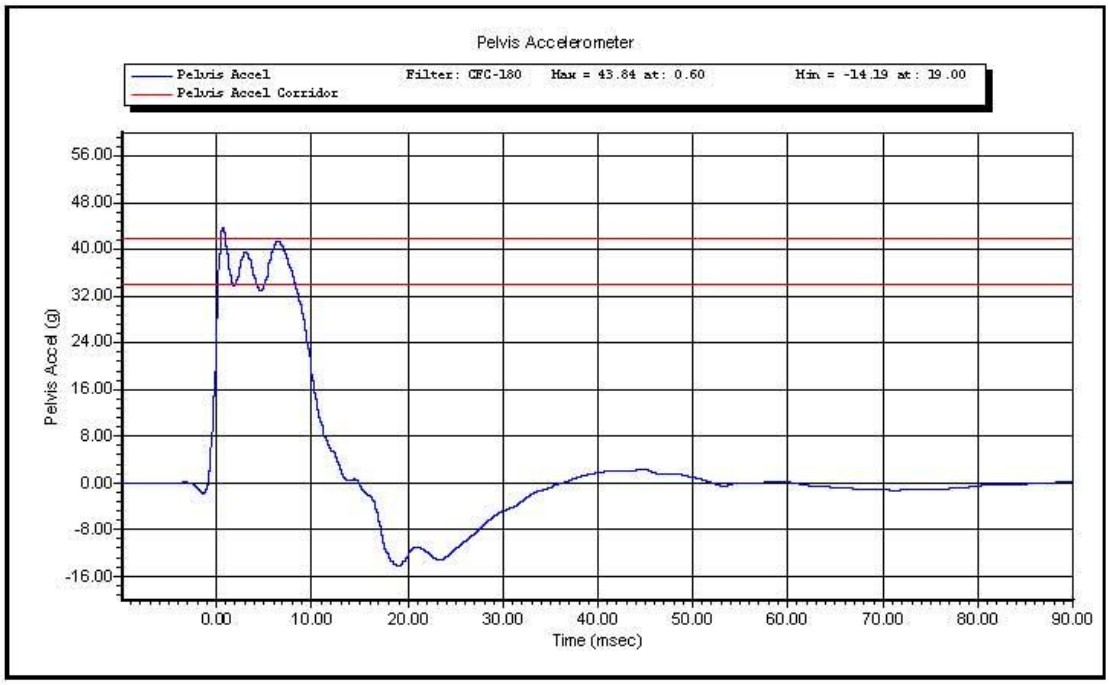
Test Name:	**Pelvis**	Revision:	**8/24/2009**
Sub Test Name:	**Acetabulum Impact**	Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/17/2011**
Test Number:	**2**	Test Time:	**9:11:19 AM**







Test ID: Test Time: **9:11:19 AM** Test Date: **10/17/2011**

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VERIFICATION REPORT

Test Name:	**Pelvis**	Revision:	**8/24/2009**
Sub Test Name:	**Iliac Impact**	Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/15/2011**
Test Number:	**1**	Test Time:	**7:51:26 PM**

Component Part Number	Component Serial Number
180-4343 Pelvis Flesh	**DG3207**

Test Parameters	Test Specifications			Test Results		
Temperature	20.6	--	22.2	**21.1**	deg C	P
Humidity	10	--	70	**46**	%RH	P
Velocity	4.20	--	4.40	**4.33**	m/s	P
Peak Probe Acceleration	36.0	--	45.0	**43.1**	g	P
Peak Pelvis Acceleration	28.0	--	39.0	**34.4**	g	P
Peak Iliac Force	4.10	--	5.10	**4.78**	kN	P

All test parameters are within specifications

Technician: **A. Rudniski**

Supervisor: **D. Travale**

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VERIFICATION REPORT

REFERENCE EQUIPMENT

Manufacturer	Model	Serial Number	Calibration Date
DentonATD	**Velocity Trap**	**1**	**1/11/2011**
Endevco	**7264-2000**	**P18524**	**7/28/2011**
Endevco	**7264-2000**	**P51875**	**9/29/2011**
DentonATD	**3228J**	**LC-281Fy**	**8/31/2011**

Test ID: Test Time: **7:51:26 PM** Test Date: **10/15/2011**

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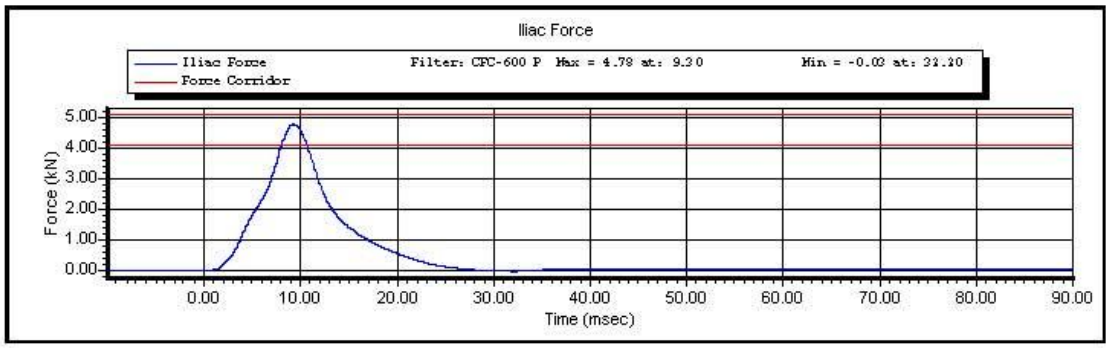
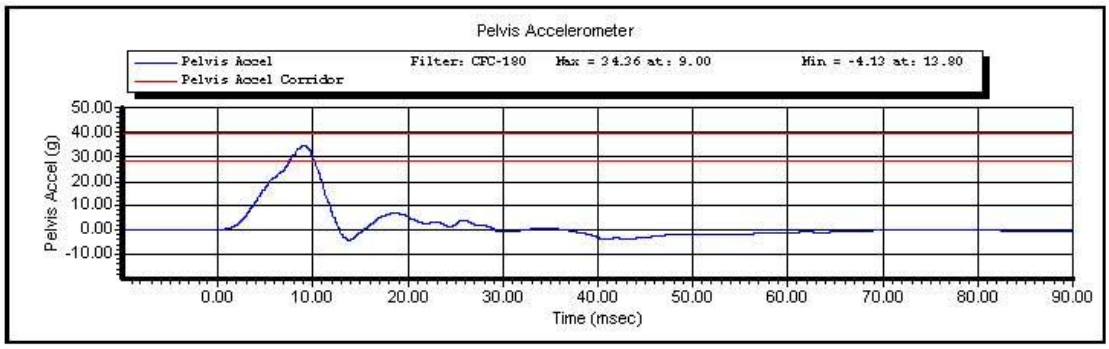
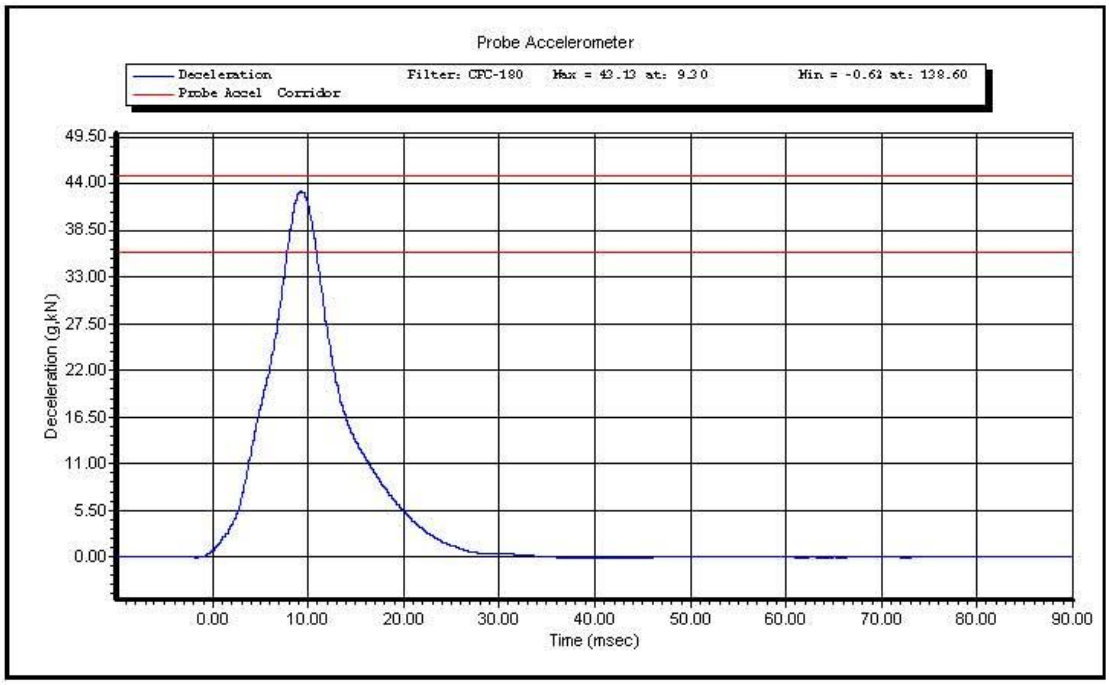
Test Name:	**Pelvis**	Revision:	**8/24/2009**
Sub Test Name:	**Iliac Impact**	Spec Type:	**NHTSA**
ATD Type:	**SID-IIs**		
ATD Serial Number:	**DG8012**		
Test ID:		Test Date:	**10/15/2011**
Test Number:	**1**	Test Time:	**7:51:26 PM**







Test ID: Test Time: **7:51:26 PM** Test Date: **10/15/2011**

Appendix D
Test Equipment and Instrumentation Calibration Data

Table 1 – Dummy Instrumentation

				SID-IIs S/N DG8012		
				Serial Number	Manufacturer	Calibration Date
Head Accelerometers			X	AC-P51885	Endevco	9/30/2011
			Y	AC-P58839	Endevco	9/30/2011
			Z	AC-P51991	Endevco	9/30/2011
Head Accelerometers			X	AC-P68058	Endevco	9/22/2011
			Y	AC-P51994	Endevco	9/22/2011
			Z	AC-P68059	Endevco	9/22/2011
Upper Neck Accelerometers			Fx	LC-2192Fx	Denton	8/31/2011
			Fy	LC-2192Fy	Denton	8/31/2011
			Fz	LC-2192Fz	Denton	8/31/2011
Upper Neck Accelerometers			Mx	LC-2192Mx	Denton	8/31/2011
			My	LC-2192My	Denton	8/31/2011
			Mz	LC-2192Mz	Denton	8/31/2011
Displacement Potentiometer	Shoulder		Y	CS-26	UNK	10/18/2011
	Thoracic Rib	Upper	Y	DS-1849	Denton	9/1/2011
		Middle	Y	DS-1857	Denton	9/1/2011
		Lower	Y	DS-1859	Denton	9/1/2011
	Abdominal Rib	Upper	Y	DS-1860	Denton	9/1/2011
		Lower	Y	DS-1861	Denton	9/1/2011
Lower Spine Accelerometers (T12)			X	AC-P52100	Endevco	10/5/2011
			Y	AC-P58796	Endevco	10/5/2011
			Z	AC-P50098	Endevco	10/5/2011
Lower Spine Accelerometers (T12) Redundant			X	AC-P51947	Endevco	10/5/2011
			Y	AC-P58715	Endevco	10/5/2011
			Z	AC-P52058	Endevco	10/5/2011
Acetabulum Load Cell			Y	LC-102Fy	Denton	5/25/2011
Lilac Wing Load Cell			Y	LC-281Fy	Denton	8/31/2011
Pelvis Plug (Struck Side)				CS-28	UNK	10/18/2011
Pelvis Plug (Non-Struck Side)						

Table 2 – Vehicle Instrumentation

Vehicle Instrumentation		Serial Number	Manufacturer	Calibration Date
Vehicle Center of Gravity	X	AC-A081433	MS	10/4/2011
Vehicle Center of Gravity	Y	AC-A005869	MS	10/4/2011
Vehicle Center of Gravity	Z	AC-A081445	MS	10/4/2011
Left Floor Sill	Y	AC-A081420	MS	10/4/2011
A-Pillar Sill	Y	AC-A081464	MS	10/4/2011
A-Pillar Low	Y	AC-A081452	MS	10/4/2011
A-Pillar Mid	Y	AC-A081463	MS	10/4/2011
B-Pillar Sill	Y	AC-A081442	MS	10/4/2011
B-Pillar Low	Y	AC-A079084	MS	10/4/2011
B-Pillar Mid	Y	AC-A016518	MS	10/4/2011
Driver Seat	Y	AC-A081460	MS	10/4/2011
Engine Top	X	AC-A081461	MS	10/4/2011
Engine Top	Y	AC-A081425	MS	10/4/2011
Firewall	Y	AC-A081444	MS	10/4/2011
Right Roof	Y	AC-A081417	MS	10/4/2011
Right Floor Sill	Y	AC-A081429	MS	10/4/2011
Rear Floorpan	X	AC-A032569	MS	10/4/2011
Rear Floorpan	Y	AC-A035443	MS	10/4/2011

Tale 3 – Pole Instrumentation

Pole Instrumentation	Serial Number	Manufacturer	Calibration Date
Load Cell 1	LC-18880	Interface	9/22/2011
Load Cell 2	LC-18850	Interface	9/22/2011
Load Cell 3	LC-46979	Interface	9/22/2011
Load Cell 4	LC-18857	Interface	9/22/2011
Load Cell 5	LC-18844	Interface	9/22/2011
Load Cell 6	LC-46933	Interface	9/22/2011
Load Cell 7	LC-18866	Interface	9/22/2011
Load Cell 8	LC-46949	Interface	9/22/2011